

# STREET TRAFFIC REGULATION

General Street Traffic Regulations — Special Street Traffic Regulations  
—Changes in Car Tracks and Curb Lines — City Planning  
—Road Signs—Articles and Addresses on Street Traffic  
—Federal License and Registration for Motor Cars  
—Civic Transportation — Police Administration  
—Police Horses — Equipment — Uniforms  
—How to Improve City Car Service

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DEDICATED TO THE TRAFFIC SQUAD  
OF THE  
BUREAU OF STREET TRAFFIC  
OF THE  
POLICE DEPARTMENT  
OF THE  
CITY OF NEW YORK

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BY WILLIAM PHELPS ENO

Author of Articles, Pamphlets and Addresses on Street Traffic Regulation and Civic Transportation—Folder of Rules for Driving furnished to and issued by the Police Department, Oct. 30, 1903—Articles and Sections of the Road Ordinance passed Dec. 14, 1903—Revised Folder and Poster of Rules for Driving and the Regulation of Street Traffic furnished to and issued by the Police Department, Feb. 22, 1908, and embodied in the Handbook of Police Regulations, Sept. 8, 1908—Revised Folder and Poster of Rules for Driving and the Regulation of Street Traffic issued by the Police Department, Feb. 8, 1909—Blue and White Traffic Signs in use and planned for, etc.

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JULY, 1909

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## PREFACE.

The work of which this volume treats was begun in 1899. A complete history since its beginning has been kept in a series of scrap books comprising all the data that could be obtained from other countries, besides local articles, clippings, letters, photographs, cuts, etc. It was at first taken up because of personal realization of needless inconvenience through the blocking of streets by ungoverned traffic and difficulty in getting carriages at the opera and theater. Its usefulness in saving life, time and money became so apparent that it has since interested me absorbingly.

The greatest difficulties I met with, in my unofficial capacity, were the indifference and ignorance of city officials, and their slowness in realizing their duties in regard to the development of a thing that was new to them, and I have often been forced to be disagreeably insistent in order to accomplish anything at all.

It took several years to get traffic regulations started, but shortly after that had been attained, a change of administration upset the most important part, and it became a choice as to whether to abandon what I had given so much effort to accomplish, or to try to bring it back again to where it had been. I chose the latter. It has now progressed far beyond that point. The work on the streets is carried on by an exceedingly well trained and faithful body of men. The office organization, however, is sadly undeveloped, lacking a complete system for the keeping of records. There is still much to do in simplifying and improving special regulations. The granting to the Police Department of ample power of summons and complaint is absolutely necessary to avoid useless hardships to citizens and waste of time by the police officers.

I am more fully aware than any one else how imperfect and incomplete is this book. Much of it has been rewritten several times as my knowledge has increased. I have decided, however, to publish it without waiting any longer, as something of the kind has been sadly needed, and there is no other work on the subject.

It is a pleasure to acknowledge the help I have received from Mr. Samuel Walter Taylor, editor of the "Rider and Driver," from Captain Alexander R. Piper, U. S. A., retired, who was Second Deputy Police Commissioner and in charge of Street Traffic in the early and most vital stages of the work, and from Mr. Frederick H. Bugher, Second Deputy Police Commissioner, now in charge of Street Traffic. To some of the papers and many individuals who have given valuable suggestions and advice my thanks are due; and also to the Traffic Squad, whose members are carrying out the regulations with diligence and enthusiasm, and to them I dedicate this book with the hope that it may merit their approval and that I may have earned their friendship and esteem.

WILLIAM PHELPS ENO.

June 3rd, 1909.



# Introduction.

## Containing a Synopsis of What Has Been Accomplished and What Remains to Be Done to Complete the Work.

Regulation of street traffic was unknown in New York up to January, 1900. Although traffic was much less than now blockades were frequent throughout the city. Many unnecessary hours and often the greater part of a day and night were consumed in transporting merchandise from point to point, especially in the downtown shipping districts. Charges were increased proportionately with the time consumed. Conditions were execrable so far as time, economy, comfort and safety were concerned, and the police, without systematic direction, were powerless and in fact practically at the mercy of the mob. Collisions between policemen and truckmen, cabmen and others were of common occurrence, and it was only by resort to the "night stick" that in many instances blockades could be cleared away.

At that time I had written an article entitled "Reform in Our Street Traffic Most Urgently Needed." Presenting the article to Mr. Samuel Walter Taylor, editor of The Rider and Driver, he published it in that paper under date of January 20, 1900, and thereafter lent his enthusiastic aid towards what has since been accomplished.

Following my first article I published another, on February 10, 1900, with the title "Suggestions for the Management of Carriages at Entertainments," and still another, on January 5, 1901, entitled "Rules of the Road Revised." This latter was in the form of a proposed set of ordinances, and after being revised twice was sent to the Aldermen in February, 1903.

These three articles were copied, in whole or in part, in many of the daily and weekly papers, which did a great deal to awaken the public to the necessity for action, and on February 1, 1902, were published in pamphlet form and given wide distribution. Each contained an endorsement slip, and those sent to the Police Stations and Fire Department Houses were returned with the signatures of practically the whole of both commands.

During the Police Administration of which Capt. A. R. Piper, U.S.A., was Deputy Police Commissioner he was detailed to organize a system of street traffic management. He studied the subject in London during 1902 and on his return introduced the block system at important street crossings. At his suggestion three mounted policemen were posted on Fifth Avenue. On December 7, 1903, I succeeded in getting their number increased to six. Captain Piper's most excellent work during the start of street traffic regulation is worthy of the highest commendation, and his going out of office was a serious loss to the Police Department work as a whole and to the development of street traffic management in particular.

In February, 1903, I caused to be introduced in the Board of Aldermen an ordinance on the "Rules of the Road." There was much opposition to it by some of the members of the Board, owing to one of them having himself compiled an ordinance which he wished to have adopted. The articles and sections of his proposed ordinance appeared to be largely copied from mine, which had been published previously, but so badly mixed up, however, by rearrangement and re-wording, and by unimportant interpolations and important omissions, that it was opposed by the Police Department as tending rather to complicate than to simplify. Meanwhile the Police Depart-

ment was finding it extremely difficult to make any headway with traffic regulation. It was at this juncture that, having made a careful re-examination of the City Charter, Penal Code, Sanitary Code and existing Ordinances, I was convinced that the Police Department was already vested with sufficient power to regulate traffic without the help of the Board of Aldermen, from which it was apparently impossible to get any intelligent action. I therefore embodied the more important provisions of my ordinance in the form of a folder, called "Rules for Driving," which I, accompanied by Captain Piper, took to the Commissioner of Police, telling him that it was going to be issued for the instruction of drivers, and representing to him that it would have more effect if signed by him and distributed through the Department. On examination of the legal references which I placed before him he recognized his powers as being sufficient, and complied with my request (Oct. 30, 1903). Seventy thousand of the folders were thereupon furnished by me to the Police Department and issued by it.

This folder did excellent work and would have continued to do so had it been assiduously distributed by the succeeding Police Commissioner. It marked the real beginning of street traffic regulation in New York. In December, 1903, more than ten months after my ordinance was introduced for the second time and six weeks after the folder was put in circulation, the Board of Aldermen determined to pass their member's ordinance. This, as I have said, met with strong opposition from the Police Department, as well as from myself. However, we arranged to get some changes made and the worst features eliminated, and it was agreed then that it was better to let this ordinance go through, as there were some things in it which had not been sufficiently covered by existing laws. On December 8, 1903, a Committee of the Chamber of Commerce was appointed to get the other bad features repealed and was partially successful. The ordinance as it stands now is almost useless for the education and guidance of drivers, though as a method of punishment for infraction of police rules it is serviceable, especially Sec. 472 of Art. VII., which reinforces Sec. 315 of the City Charter.

It is a pity that the ordinance could not have been identical with the regulations contained in the folder. With such a body as the Board of Aldermen, however, I do not believe, from my experience of a long fight, that it is possible to get any really workmanlike measure passed. Its members usually have an axe to grind, and there are not enough of them of sufficient intelligence to make the body of any practical value to New York City. If it could be abolished and superseded by a commission of five men of high grade, it would be a great step in advance. The ordinance, as it stands, is therefore, unfortunately, useless as a means of instruction and guidance for drivers, as it is too complicated to be easily understood. Notwithstanding this fact, it takes its place among the laws useful in enforcing the traffic regulations as set forth in the folder.

At the same time that the folder was introduced, with the approval of the Police Department and the assistance of the President of the Borough of Manhattan, Mr. Jacob A. Cantor, who was ever ready to help, I got the first one hundred blue and white enameled signs, directing that "Slow Moving Vehicles Keep Near Right Hand Curb," put up on Fifth Avenue and Broadway. (These signs are shortly to be superseded by new ones somewhat different and improved in wording.)

It was a matter of much regret that the work then so well started should have been hampered by the following Commissioner of Police. The incumbent of that office, succeeding General Greene, made a most serious blunder by stopping the issue of traffic regulation folders, which retarded the work of educating the drivers in the rules. It is very important to have the police trained for traffic duties, but infinitely more important that the drivers should know what is expected of them. When the drivers know, they usually not only comply themselves, but protest when others do not, and thus themselves be-

come regulators of traffic. This successor of General Greene introduced various ridiculous regulations at specially congested points. Regulations were needed at many of these places, but they should have been simple and founded on common sense, knowledge and experience. At the time this Commissioner was relieved from office he had succeeded in having more men employed on traffic duty than when he came in, which was to the advantage of the next Commissioner, who took office in January, 1906.

General Bingham delegated the management of Street Traffic to a Deputy Commissioner. The preceding Commissioner had placed mounted men in many places where men on foot would have been better. This Deputy Commissioner was prevailed upon to remove some of these and to do away with or modify the regulations at congested points. Apart from this, the Deputy Commissioner's management was mostly negative. It seems in place here to call attention to the importance of having a high-class, able man in control of traffic. He should have no other duties and his tenure of office should be continued during efficient service, with commensurate pay. No one can learn the work as it should be known till he has spent months and probably years at it.

Frederick H. Bugher, Esq., of Washington, D. C., is Second Deputy Police Commissioner and has been in charge of the Bureau of Street Traffic for about two years. Under him much has been gradually accomplished. Mr. Bugher has the well merited respect and confidence of the entire force. It has been unfortunate, however, that Mr. Bugher could not have devoted more time to the Bureau of Street Traffic, for unless he or someone else can give this matter his constant attention and study, it must continue in an unsatisfactory state of development. The problems of street traffic management are complicated and often new and are increasing all the time in number, difficulty and importance. They call for not only the best ability but incessant study, in order to solve them in the simplest and best way.

It has been my good fortune during the past few years to get pretty well acquainted with many of the men on the Traffic Squad (Mounted, Foot and Bicycle) and I doubt if there is a finer body of men in any army in the world. Very little of the bad that has been said of our police officers could apply to these men, and if the *esprit de corps* that obtains now amongst them continues, it cannot help but prove an inspiration for a better standard for the police force at large.

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When I began this work ten years ago there was no Bureau of Street Traffic, no Traffic Squad and not one officer employed on street traffic duty. As the police manual says: "It may well be doubted now whether the business of New York could get on without the Traffic Squad. It is vital to the life of a great city that its life-blood, namely traffic, should circulate." The work has so increased that it has already become necessary to organize it in 4 precincts as follows:

- A. At City Hall, Manhattan.
- B. At 36 E. 9th St., Manhattan.
- C. At 1 E. 27th St., Manhattan.
- D. At 118 Waverley Avenue, Brooklyn.

The Traffic Squad, proper, on Dec. 31, 1908, consisted of 680 men. To these should be added the detail of 32 men to the License Squad, really traffic duty, and of 31 from the Bridge Squad for traffic duty at theatres, making in all 743 men or about 7½% of the whole Police Force. Of this number, 138 men are mounted and 18 are on bicycles. All policemen when on the streets should attend to traffic duty when emergency or necessity requires, so that really a much greater part than 7½% of the police work is devoted to Street Traffic Regulation, which has now become of more importance than any other one thing that the Police have to do with. It is a

question for the future whether or not there will be a part of the Police Force designated as the Traffic Squad. *Traffic regulation, to a greater or less degree, is the duty of every uniformed officer*; the only members of the force who have no traffic duty are the ununiformed detectives. The creation of the Traffic Squad outside of its relation to special work has done a great deal of good in bringing to the front a new and better average type of policeman.

Many of the men not on the Traffic Squad do not know their duties in regard to traffic, while others who know shirk them. A general order should be issued from headquarters signed by the Commissioner requiring all officers to attend to traffic duty whenever any breach of the regulations occurs, and directing them to lend a hand in helping a fallen horse or a driver who needs assistance without waiting to be asked to do so. Every police officer should be required to post himself thoroughly in regard to cab tariffs so as to decide any dispute in regard thereto intelligently. Should a complaint be made to him he should take down the name and address of both parties and of the owner of the cab, its number, the driver's license number if any, and any other details necessary. These details he should give to each of the parties and enter them in a note book (with which every officer should be furnished by the Department for this and similar purposes) and a record made of the incident on his return to his station-house, which record should be sent to the Bureau of Street Traffic for filing, where either party can appeal from the officer's decision afterwards if he chooses. *The traffic regulations are printed in the police manual and issued to all policemen alike, and they have no business to neglect them.* It is largely due to strict attention to them by all officers that London traffic is so well handled. Every policeman is supposed to be an efficient servant of the people and if one of them stands by or walks away and allows infractions of regulations or neglects to give assistance when needed, whether he chooses to regard that special thing as part of his duty or not, he fails in his obligation to the City and should be severely punished.

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Much has been done, but the experience acquired while helping to do it has opened up a vista of future possibilities for the Bureau of Street Traffic. The most pressing of the objects remaining to be accomplished are:

1st. Educating the drivers and pedestrians to a fuller understanding of the Traffic Regulations by a steady and continued distribution of the folders and by keeping the posters up in all public stables and garages and also by putting them at cab stands and other prominent places on iron or bronze standards. By this method there can be no excuse for not knowing them and every driver who knows them will resent infraction of them by others, and thus himself become a strong factor in their enforcement.

2nd. Perfecting the Bureau of Street Traffic, especially as to its office management, so that complete records can be kept of extortionate cab drivers and of drivers of all public, licensed or numbered vehicles; of accidents, breaches of regulations, speed laws, driving without license, cruelty to horses, etc.

3rd. Giving to the Police Department through the City Charter ample power of Summons and Complaint, to provide for the summoning of an offender of any of the Traffic Regulations, including speed violations and accidents, where no serious bodily harm has been done.

4th. Transferring of the License Bureau from the Mayor's Marshal to the Bureau of Street Traffic, with power to examine drivers and issue licenses only on satisfactory passing of examinations, and to issue numbers for such vehicles as are required by law to have them. This Bureau should also examine taximeters, which should be done at regular intervals and whenever complaint is made of overcharge, and the taximeters should be sealed and a heavy penalty imposed if the seal is broken. It should establish certain reg-

ulations and standards for all public vehicles, specifying how and where they should carry their numbers and tariffs and what their dimensions and equipment should be, which should apply equally to horse-drawn vehicles.

5th. Improving of plans at specially congested points, at some of which posts and ropes (heavier than those used now) should be used. The posts should be spiked to the pavement and have lamps on them and be left up all the time. This method will serve to show by experience what changes are necessary in curb lines and car tracks and when this has been demonstrated to the satisfaction of the Bureau of Street Traffic, it should recommend the proper authorities to have these changes made.

6th. Revising and perfecting plans for the management of carriages at the opera, theatres and private entertainments.

7th. Bettering the management of parades and arranging them and directing their routes and times so as to avoid unnecessary interference with other interests. At least once in every ten minutes other traffic should be allowed to cross them. In my opinion, except on very important occasions, parades, now that it has become so exceedingly necessary not to impede business, should be relegated to those streets where there is comparatively little traffic. It is better that those who want to see them should take the trouble to go where they are than that all other interests should be made to suffer.

8th. Giving the Police Department sufficient authority over the Street Cleaning Department to direct what streets and what parts of streets shall be cleared first of snow so as to hinder traffic least. That most neglected necessity of sanding the streets, when slippery from any cause, should be made a part of the duties, either of the Bureau of Street Traffic, or of the Street Cleaning Department, under its direction.

9th. Empowering the Police Department to control the watering of streets, especially asphalted streets, which should never be sprinkled, but should be regularly flushed at night.

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In Part III will be found a few of the many articles I have previously published as well as some new ones on street traffic. Those omitted are of no further use, as they have accomplished their purpose. The elemental stages of the work having been passed, New York will shortly have, if the work continues to progress on the lines I have laid down, as perfect street traffic management as exists anywhere in the world.

It was not until March, 1908, that I was able to get my folders and posters of Rules for Driving and the Regulation of Street Traffic in force again. These Rules and Regulations now form part of the Rules and Regulations of the Police Department, published in its Manual, September 17th, 1908. It will be remembered that the first issue of these Regulations, which had taken so much time and work to get adopted in November, 1903, had been discontinued by a Police Commissioner in 1904, and it took over four years of very disheartening effort to undo the harm he had done and to start street traffic regulation again by the only rational and economical method, namely—the education of the drivers themselves.

At the same time that the regulations were issued in March, 1908, I also compiled and furnished the Bureau of Street Traffic with a legal reference card which gives all the legal references to each Article and Section of the Regulations. When an arrest is made the officer marks on the margin of the card the Article and Section of the regulation that has been violated, and opposite to it the magistrate finds all the legal references bearing on it. The legal instruments referred to are the Charter of the Greater City of New York, the Penal Code, the Sanitary Code and the City Ordinances. Shortly after this I got up, with the assistance of Deputy Commissioner Bugher, a complaint form, with an arrest form on the reverse side. This is a card 5 by 8 inches and it is kept at the Bureau of Street Traffic and at all Police Stations.

When filled out, these cards are filed and constitute a record of all drivers who have been arrested, or against whom a complaint has been lodged.

I refer my readers, several times, in the body of this work to the Traffic Act and Regulations and the complaint forms by Superintendent of Traffic Alfred Edward, Sydney, N. S. W., Australia. The student of street traffic should carefully examine these, as they are very complete and excellently gotten up, and so far as I know there is nothing that has not been rendered obsolete by them. It would be well also to investigate what has been done in London lately, where, he writes me, they have been revising their regulations and, having seen allusions to his work in my articles, asked him to forward his book and are using it in their revision. The method of keeping tab on the cab drivers in London should be looked into and the necessity of limiting the width of vehicles in New York is of vital importance, especially in view of the fact that sight-seeing automobiles are being made so wide as to interfere with other traffic.

The conditions in English cities are somewhat different from those in New York. In the former, the drivers are generally familiar with the rules of the road and traffic regulations while, in the latter, they are just beginning to learn them and to realize their importance. It is for this reason that I have laid so much stress on the use of the folder and poster of "Rules for Driving and Street Traffic Regulations."

*Education of the drivers is absolutely the keynote of street traffic regulation and without it nothing can be either economically or speedily accomplished.*

When the drivers, generally, understand the regulations and the police have reached the highest efficiency; when plans for keeping vehicles in their places at all particularly congested points by means of posts and ropes, and those for the management of vehicles at theatres and other places have been perfected, and the tabulating work at the Traffic Bureau has been properly done, then the limit of what traffic management can do will have been reached, so far as the police can affect the subject.

Plans beyond the power of police management, for the relief of traffic congestion, include the widening of the roadbeds of certain streets and other changes in the curb lines; shifting and changing the curves of street car tracks; putting crosstown car tracks under ground; changing some of the entrances to subways from the sidewalks to positions inside buildings, etc.

There are other minor things which need to be done, such as taking up all unused car tracks; compelling the car companies to make all repairs at night; limiting the time when the streets can be dug up for any purpose to certain hours and, where the work is not finished within these hours, requiring the surface to be temporarily repaired so that traffic shall not be interrupted. But:

*Unless the height of buildings is regulated by law, or by taxation in proportion to their height, or by a combination of the two methods; unless a complete plan for underground rapid transit, sewers and pipe galleries be adopted, before more obstructive subway work is undertaken, no street traffic rules or regulations or enforcement of them can possibly provide for the natural increase of surface traffic, either on the sidewalks or on the roadways of New York City.*

*What would have cost practically nothing but a little forethought, a few years ago, will now require tens, and, if continued, hundreds or perhaps thousands of millions, eventually.*

*It is the old story of "a stitch in time saves nine," and it is also a serious reflection on the intelligence of the citizens of New York that they have not sooner taken sufficient interest in these matters of civic government and, by blotting out corrupt politics and appointing decent men, and running their city on business principles, avoided such costly blunders.*

## PART 1.

# General Street Traffic Regulation.

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### CHAPTER I.

#### On the Absolute Necessity of Instructing Drivers in Street Traffic Regulation Before Anything Worth While Can be Accomplished.—Review of Street Traffic Conditions in Other Countries and Why They Differ, etc.

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Street traffic regulation is the management of vehicles so that they shall interfere with one another as little as possible, and be enabled to go from point to point in the shortest time and with the least danger to themselves and pedestrians. This result can be brought about by police enforcement of the regulations, which must be simple, and by teaching them to the drivers. Experience has shown that in London the drivers themselves have proven the best regulators of traffic, because, knowing their duties as well as their rights, they strictly observe the former and resent interference with the latter by others, who are not excused for ignorance. It becomes, therefore, of the first importance to educate the drivers so as to make them, as well as the police, the regulators of traffic.

In order to attain this result we must, therefore, have:

First: Concise, simple and just regulations, which can be easily understood, obeyed and enforced, if need be, under legal enactment.

Second: Copies of these regulations must be placed where there can be no excuse for any one not seeing and learning them.

Third: The police ordered and empowered to enforce the regulations, and trained for the purpose.

We may divide the drivers who come under the regulations into four classes:

First: Those who know the regulations and are willing to obey them.

Second: Those who do not know the regulations, but who would be disposed to obey them if they did.

Third: Those who know the regulations, but are not disposed to obey them.

Fourth: Those who do not know the regulations, and

would not be disposed to obey them under any circumstances.

The first class in this country is, unfortunately, very small, but it is clear that it needs regulating least of all.

The second class is many times larger than all the others together, but if by education we can add this to the first, most of the difficulty will be overcome.

The third class, is fortunately, very small, and can be made to obey, by force when necessary, but the experience of other countries teaches us that those who compose this class are usually impelled to obey by the demands of those law-observing drivers who resent having their rights interfered with, and by the gradual realization of the advantages to all, individually.

The fourth class, much larger than the third, can, by education, be added to the third class, and gradually almost eliminated.

Thus we are able to practically reduce these four classes to two, as follows:

First: Those who know the regulations and are willing to obey them.

Second: Those who know the regulations, but are too selfish, vicious, or ignorant to see the advantage of obeying them.

This second class, like the poor, we shall always have with us, to some extent, and for it the only remedy is prompt punishment; but this class will diminish very rapidly through proper handling.

It is a self-evident fact that as the number of those who become familiar with the traffic regulations increases, the less the expense and the work that will have to be done by the police. In other words, pennies expended on education will save dollars spent in enforcement, which en-

forcement is otherwise imperfect, incomplete, incompetent, wasteful, and utterly unsatisfactory, and must always so remain unless common sense methods are applied.

Common sense methods are so easy, economical, efficient and comprehensive that there is no apparent reason why they should not be employed.

*Education of the drivers as to their duties and rights is, really, the keynote to efficient and economical street traffic regulation, and any one in charge of street traffic can be nothing but a stumbling block to its development and proper control unless he sees the importance of this fact, and acts upon it.*

It is impossible to enforce any public regulation, except by brute force, unless we inform the people to be so governed as to what they are expected to do. The folders of "Rules for Driving and the Regulation of Street Traffic," for the City of New York, to be found on pages 4 and 5, serve this purpose. They are freely distributed, and kept at the Bureau of Street Traffic, and at the police stations, and issued on application. The "Rules for Driving and the Regulation of Street Traffic" are also printed in a larger form, and put up by the Bureau of Street Traffic in every public stable and garage in a convenient and accessible place for reference. Standards, also, displaying the rules, should be maintained at all important cab, hack, and truck stands, and other prominent places, so that the public, pedestrians as well as drivers, may become acquainted with the regulations. The standards should be made of iron or bronze and of simple and appropriate design. The reverse side of the standards would be useful for special notices in relation to traffic from time to time as necessity might require. I hope to get some of these standards made and in place before long.

It is at the risk of repeating myself that I dwell on this matter of education! It is all-important! Unless my reader can see this point there is no use of his reading any further.

If we observe the conditions in other countries we find that traffic moves more smoothly in England than elsewhere. The uninitiated attribute the smoothness entirely to the police, and to the fact that drivers there are amenable to authority. Much of this is the case, because the police are thoroughly trained in their duties, and the drivers, who see the advantage of it, are amenable to authority; but back of this is the still more important fact that the English are, and have been for generations, a nation of horsemen. It is the exception and not the rule to find an Englishman who does not know how to drive, and who does not understand and observe the rules and etiquette of the road. The English, as a rule, are also fond of fair play, and not only give it but demand it from others—they know their duties and

perform them, but at the same time vigorously resent having their rights interfered with by careless, ignorant, or perverse drivers. If we add to this the fact that the English are a nation of "kickers," we will have found a full explanation of the orderly movement of traffic.

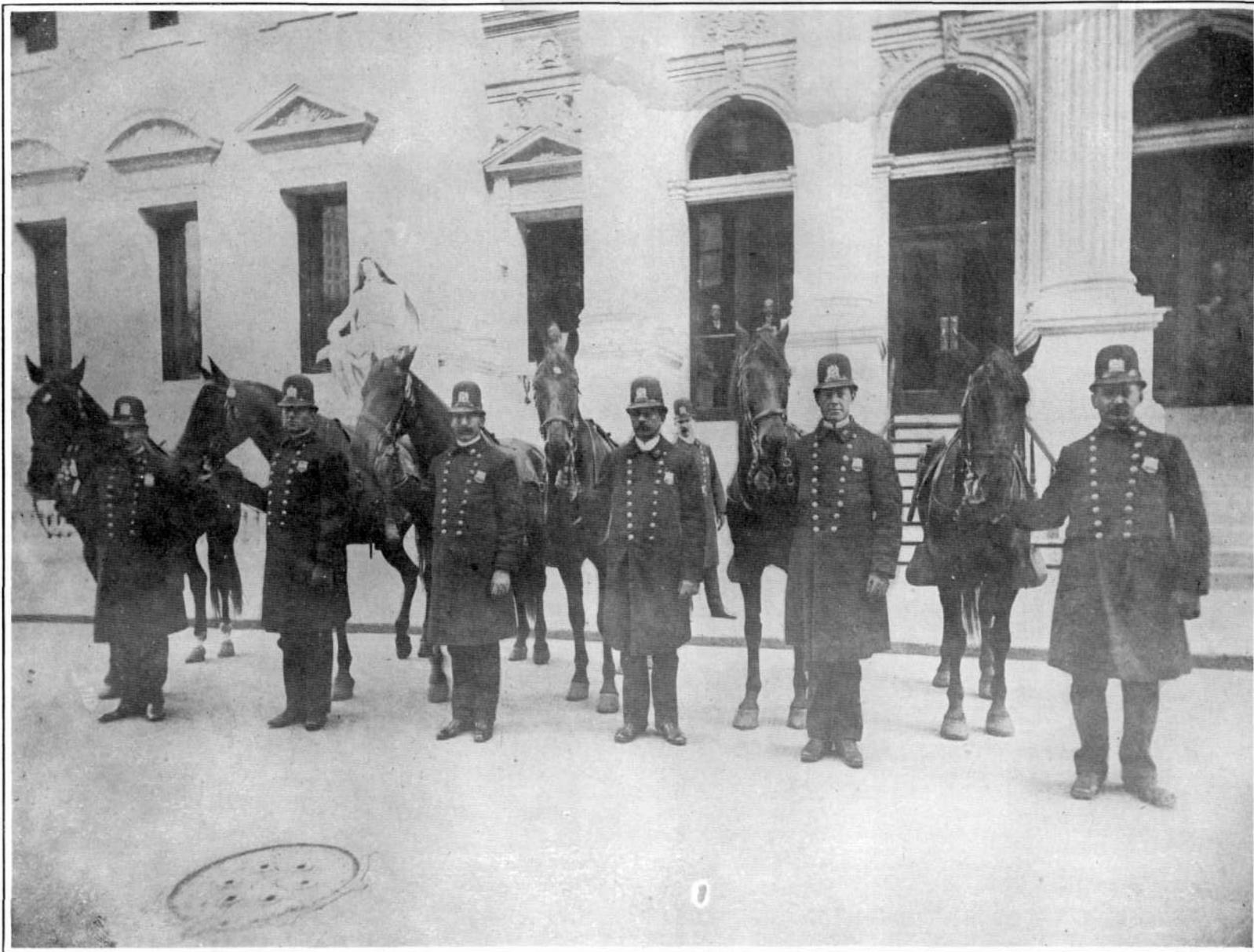
A short time spent driving around London will convince any one who observes that the drivers themselves are the real regulators of street traffic under ordinary conditions. The presence of the police is needed, principally, at the intersections of crowded thoroughfares, to give the signals for alternately stopping and starting the lines of traffic in crosswise directions.

In Paris, the number of police employed for traffic duty is much greater than in London, for obvious reasons, and, where there are enough police, traffic moves comparatively smoothly, owing to their active direction and enforcement of the regulations, but just as soon as there are no police nearby everything is in confusion. The reason is that in Paris the drivers do not know the traffic regulations, and are forced into place by the activity of the police. The conditions might be compared to making eight people dance the lancers who had never heard of it before—which would be possible by having an instructor behind each of the dancers to push him through the figures, but it would be a rather expensive and unsatisfactory method, and the more so as the next time the operation must be repeated. If, however, the figures be taught to the dancers, one by one, the services of the eight pushers could be dispensed with, and one prompter substituted.

If the drivers in Paris knew their traffic regulations, the same ease and smoothness of traffic movement would exist in that city as in London, except for the shortcomings of the drivers, especially the cab drivers, in not knowing how to drive. If the granting of a driver's license were dependent not only upon knowledge of the rules of the road but also upon knowing how to drive safely, it would not be long before practically the same conditions would obtain in Paris as in London, and at a large saving in expense for police, as one officer would do the work better than several can do it now.

The inferiority of traffic management in Paris to that of London was so apparent in years gone by that the Paris authorities, I am told, brought London policemen over to Paris to teach their officers how the work should be done. The police in Paris, now, apparently know their business exceedingly well in regard to traffic duty and do their best, but their best may be likened to the labors of Hercules in cleaning out the Augean Stables.

In Germany, Italy and all the other continental countries, so far as I know, the conditions are as bad as in Paris, or worse; wherever any traffic regulations are attempted money and time are being wasted, and all for the lack of a little common sense and knowledge.



FIRST SIX MOUNTED MEN OF TRAFFIC SQUAD, 1903



OFFICERS AND TYPES OF HORSES ON TRAFFIC DUTY

## CHAPTER II.

### **The Folder of "Rules for Driving and the Regulation of Street Traffic."—Notes on the Articles and Sections of the Folder.—How to Adapt Them to Other Cities, etc.—Legal Method of Enforcing the Provisions of the Folder.—Giving References to All Existing Laws on the Subject.—Tabulated Legal Reference Card for Each Article and Section of the Folder to All Laws Bearing on It.**

#### **Directions for the Use of the Folder.**

- No. 1. Distribute copies of it freely.
- No. 2. Keep them at all police stations, where they can be obtained on application.
- No. 3. Have policemen always provided with folders, to be given to drivers where practicable when they see them disobeying any regulation, and mark on the folder, when thought advisable, the regulation that has been disobeyed. The policeman should also take down in his note book the name and address of the offender and report them with details and particulars on return to the station house or Bureau of Street Traffic. A record of this report should be kept at the Bureau. Whenever an arrest or complaint is made, reference should also be had to past records to see whether the driver has been arrested or complained of before and, if so, for what rea-

\* It is doubtful whether as yet the Bureau of Street Traffic of the Police Department has the legal power to enforce compliance with a summons, but this power should be given it. The Charter of the Greater City of New York is now being revised, and when the revision is completed it should provide the Police Department with power of summons and complaint. This power should be sufficient to provide for the summoning of an offender of any of the traffic regulations, including speed violations and accidents where no serious personal harm has been done. The officer should, of course, use his discretion and make an arrest when it does not appear to him that the identification and responsibility of the offender is sufficient to assure his obeying a summons.

It may be that, in the interim, a simple printed form prepared to be signed would answer the purpose. It should state that in consideration of the fact that the offender is not immediately conducted to a police station, he will agree to put in an appearance for examination on written notification at such future time and at such place as may be appointed therein. Of course, if he

The following folder is now in use and is an improvement and slight enlargement of the one entitled "Rules for Driving," which I furnished to, and which was issued by, the Police Department, October 30, 1903. There have been also two intermediate issues. While it has been increased in scope, there is no provision that should prove a hardship to any one who knows how to drive, and who has due regard for the comfort and safety of others as well as his own. In fact, there is no act required by the regulations which a good driver, familiar with the best usages and the etiquette of the road does not habitually observe, through common politeness, consideration and the instincts of humanity. The main object of the folder is to increase the number of such men as I thus describe. Fortunately, the number of those who can be transformed by education is much greater than those who cannot; and the small number eventually remaining can be forced to obey.

son, and any other details of the offense which should have been minutely recorded and tabulated at the time. A confirmed culprit should be severely dealt with.

Except in very unusual cases it is not necessary or desirable to make an arrest, because, in the first place, it takes the officer away from his other duties, and in the second place it imposes an unjust hardship on the driver, if he has committed an offense or caused an accident unintentionally, and often entails a serious inconvenience to his employer. Taking down the name and address of the offender and issuing a summons\* to him afterwards would answer every purpose. The penalty for giving a false name or address should be so heavy as to make it most unlikely to be attempted. The Bureau of Street Traffic should be empowered to issue summonses and have printed forms of complaint with a proper one for each particular case to accompany the summons.

refuses to sign he must be taken to the Bureau of Street Traffic or to a police station, and be amenable to the law in the usual way. I tried during the winter of 1907-'08 to get the Police Department to take my view of this matter, and to issue blank forms to the officers to be used for this purpose, but the Commissioner, for some reason, would not do it, though I was unable to see any sufficient reason why it should not be tried and why it would not work.

It would still further tend to simplify and avoid trouble and waste of time if there were a Street Traffic arbitrator at each Traffic Bureau station, whose duties should be to examine all cases of street traffic accidents and breach of street traffic regulations, and decide what punishments should, in his opinion, be meted out or what damages should be paid. If the culprit chooses, he would, of course, have the right to resort to the courts, but in such cases the findings of the arbitrator should also be reported to them. Probably most of the traffic cases, by this method, would never go to the courts.

Many of these rules are the adaptation of laws and regulations already in force in different places. Some of the articles and sections have been taken from existing Laws of the State or Ordinances of the City of New York, usually adapted and simplified in wording and arranged in logical sequence to make them suitable for the purpose of instruction. Others have been taken from the "Traffic Act and Regulations" of Sydney, N. S. W., which is a revision of and great improvement on the London regulations. The remainder of them the author of this book has originated and compiled, and each and every one of them was framed after careful study to meet apparent necessities which were not covered by anything that the author could find already in use.

The notes following show, also, wherein the regulations should be changed to adapt them for other cities.

# RULES FOR DRIVING AND THE REGULATION OF STREET TRAFFIC

ISSUED BY THE POLICE DEPARTMENT OF THE CITY OF NEW YORK

## Article I. Importance of Keeping to the Right, Passing, Turning, Crossing and Stopping.

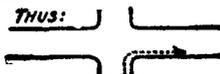
Sec. 1. A vehicle, except when passing a vehicle ahead, shall keep as near the right-hand curb as possible.

Sec. 2. A vehicle meeting another shall pass to the right.

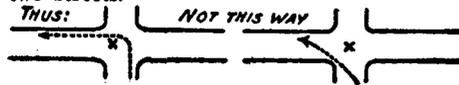
Sec. 3. A vehicle overtaking another shall pass on the left side of the overtaken vehicle and not pull over to the right until entirely clear of it.

Sec. 4. On an avenue or street, divided longitudinally by a parkway, walk, sunkenway or viaduct, vehicles shall keep to the right of such division.

Sec. 5. A vehicle turning into another street to the right shall turn the corner as near the right-hand curb as practicable.



Sec. 6. A vehicle turning into another street to the left shall turn around the center of intersection of the two streets.



Sec. 7. A vehicle crossing from one side of the street to the other shall do so



Sec. 8. No vehicle shall stop with its left side to the curb except on established cab, hack and truck stands, and in streets where and when one-way traffic is directed by white arrow signs.

Sec. 9. No vehicle shall stand backed up to the curb except when actually loading or unloading, and if said vehicle is horse-drawn and has four wheels, the horse or horses must stand parallel to the curb and faced in the direction of traffic, but no vehicle shall stand so backed up if it interferes with or interrupts the passage of other vehicles or street cars.

Sec. 10. No vehicle, unless in an emergency or to allow another vehicle or pedestrian to cross its path, shall stop in any public street or highway, except near the right-hand curb thereof and so as not to obstruct a crossing.

Sec. 11. No vehicle shall back to make a turn in any street, if by so doing it interferes with other vehicles, but shall go around the block or to a street sufficiently wide to turn in without backing.

## Article II. Signals.

Sec. 1. In slowing up or stopping, a signal shall be given to those behind by raising the whip or hand vertically.

Sec. 2. In turning, while in motion, or in starting to turn from a standstill, a signal shall be given by raising the whip or hand, indicating with it the direction in which the turn is to be made.

Sec. 3. Before backing ample warning shall be given, and while backing unceasing vigilance must be exercised not to injure those behind.

Sec. 4. One blast of police whistle indicates that north and south traffic shall stop and that east and west traffic may proceed. Two blasts that east and west traffic shall stop and that north and south traffic may proceed. Vehicles and street cars shall stop so as not to interfere with the passage of pedestrians at the crossings. Three or more blasts is a signal of alarm and indicates the approach of a fire engine or some other danger.

Sec. 5. No vehicle shall be used on any street or highway unless provided with lights and sound signals as prescribed by law.

## Article III. Right of Way.

Sec. 1. Police, Fire Department, Fire Patrol, Traffic Emergency Repair, U. S. Mail vehicles and Ambulances shall have the right of way in any street and through any procession.

Sec. 2. Subject to Sec. 1 of this article, everything being equal, all vehicles and street cars going in a northerly or southerly direction shall have the right of way over all vehicles and street cars going in an easterly or westerly direction.

Sec. 3. Subject to Sec. 1 of this article, street cars shall have the right of way between cross streets, over all other vehicles; and the driver of any vehicle, proceeding upon the track in front of a street car, shall immediately turn out upon signal by the motor-man, driver or conductor of the car.

Sec. 4. No vehicle or street car shall so occupy any street as to interfere with or interrupt the passage of other street cars or vehicles.

Sec. 5. No vehicle shall stand headed, or be driven, on any street marked by a white arrow sign except in the direction indicated by the arrow; but it may stop at either curb during the hours indicated on the sign, the usual rule of right side to curb being in force at other hours.

Sec. 6. No vehicle shall be driven, during crowded traffic hours, on any crosstown street, where there are car tracks, except for such distance as may be reasonably necessary to reach the building to which it is going.

Sec. 7. A vehicle waiting at the curb shall promptly give place to a vehicle about to take on or let off passengers.

Sec. 8. The driver of a vehicle, on the approach of a fire engine or any other fire apparatus, shall immediately draw up said vehicle as near as practicable to the right-hand curb and parallel thereto and bring it to a standstill.

Sec. 9. The driver of a street car shall immediately stop said car and keep it stationary upon the approach of a fire engine or other fire apparatus.

### Notes to the Articles and Sections of the Folder.

ARTICLE I. Secs. 8 and 10. The principle used in these sections had never been made a part of the "Rules of the Road" anywhere until I introduced it in my ordinances for New York, and in my folder on the same subject which was issued by the Police Department, October 30, 1903. I was in great doubt whether to advocate it, but the result has proved most satisfactory. It was originally intended only for large cities where the traffic is crowded, but I now fully believe it should be applied everywhere. I feel confident that experience will show that the balance of advantage is strongly in favor of it, even in country villages.

ART. I. Sec. 11. Some such rule as this has become necessary, as now an inconsiderate driver of motor or other vehicle will often hold up the whole street because he is too piggish or lazy to go around the block or to some wider street before turning.

ART. II., Sec. 4 is explanatory of the present practice of one and two whistle signals. When a car stops on the near side and passengers are getting on or off, the car should not be started in obeying the police signal until they have done so safely. The officer in charge of the intersection should use judgment so as to minimize these necessary delays.

When there is more than one officer at a crossing the whistling ought all to be done by one of them. The one to do it could be determined according to the lowest number on the shield. The whistles themselves ought either to be partially deadened or there should be other whistles of a lower and sweeter tone for this purpose. They ought to be easily heard at 150 feet, which is all that is necessary. In selecting these whistles, it would be well to take special pains not to have them disagreeable in tone. I have sometimes thought, when we get further along, that we might substitute semaphores for the whistles at important crossings, and these could be lighted in the evening. I think this might economize in the number of men required at important crossings. Much trouble is occasioned now to the police and pedestrians by vehicles stopping on crossings instead of just before they get to them. This section explains to the drivers their duties in this respect. I have added a three or more whistle signal which explains itself.

It might be well to add another section to this Article as follows:

A driver of a motor vehicle shall, at request or signal by putting up the hand, from a person driving or riding or leading a restive horse, or other domestic animal, cause the motor vehicle

#### Article IV. Speed.

Sec. 1. No vehicle shall proceed at any time at a greater speed than the law allows and is safe and proper under the conditions then obtaining.

Sec. 2. No vehicle shall cross any street or avenue running north and south or make any turn at a speed rate exceeding one-half its legal speed limit.

#### Article V. Overtaking Street Cars.

A driver of a vehicle overtaking a street car shall exercise due caution not to interfere with or injure passengers getting on or off said car.

#### Article VI. Control of Horses.

Sec. 1. No horse shall be left unattended in any street or highway unless securely fastened or unless the wheels of the vehicle to which he is harnessed are securely tied, fastened or chained, and the vehicle is of sufficient weight to prevent its being dragged at a dangerous speed with wheels so secured.

Sec. 2. No horse shall be unbitted in any street or highway unless secured by a halter.

Sec. 3. No one shall remove a wheel, pole, shaft, whiffle-tree, splinter-bar or any other part of a vehicle or any part of a harness, likely to cause accident if the horse or horses start, without first unhitching the horse or horses attached to said vehicle.

Sec. 4. No one shall cease to hold the reins in his hand while riding, driving or conducting a horse.

#### Article VII. Vehicles.

Sec. 1. No one shall drive a vehicle that is so covered in or constructed as to prevent the driver thereof from having a sufficient view of the traffic following and at the sides of such vehicle.

Sec. 2. No one shall drive or conduct any vehicle in such condition, so constructed, or so loaded as to be likely to cause delay in traffic or accident or injury to man, beast or property.

Sec. 3. No one shall so load a vehicle, or drive a vehicle so loaded, with iron or other material that may strike together without its being properly "deafened," so as to cause no unnecessary noise.

Sec. 4. No one shall drive a public, numbered, licensed or business vehicle who is less than sixteen years of age.

Sec. 5. No one shall ride upon the rear end of any vehicle without the consent of the driver, and when so riding no part of the person's body shall protrude beyond the limits of the vehicle.

#### Article VIII. Condition and Treatment of Horses.

Sec. 1. No one shall ride or drive a horse not in every respect fit for use and capable for the work upon which it is employed and free from lameness or sores calculated to cause pain, or any vice or disease likely to cause accident or injury to person or property.

Sec. 2. No one shall ill-treat, over-load, over-drive, over-ride or cruelly or unnecessarily beat any horse.

Sec. 3. No one shall crack or so use a whip as to annoy, interfere with or endanger any person or excite any horse other than that which he is using.

#### Article IX. The Respective Rights and Duties of Drivers and Pedestrians.

The roadbeds of highways and streets are primarily intended for vehicles, but pedestrians have the right to cross them in safety, and drivers of vehicles and street cars must exercise all possible care not to injure pedestrians. Pedestrians should, on their part, never step from the sidewalk to the roadbed without first looking to see what is approaching, and should not, needlessly, interfere with the passage of vehicles or street cars.

By crossing a street as nearly as possible at right angles, preferably at a regular crossing, and when a traffic policeman is stationed there, by waiting for his signal, pedestrians will greatly add to their own safety, facilitate the movement of traffic, and make it much less difficult for the horses, which often have to be reined in suddenly and painfully to avoid careless and unthinking pedestrians. Nothing in the foregoing should excuse drivers from constant vigilance to avoid injury to pedestrians under all conditions.

#### Article X. Definitions.

Sec. 1. The word vehicle includes equestrians, led horses and everything on wheels or runners, except street cars and baby carriages.

Sec. 2. The word horse includes all domestic animals.

Sec. 3. The word driver includes the rider and driver of a horse, the rider of wheels and the operator of a motor vehicle or street car.

#### Article XI. Obedience.

Sec. 1. Drivers of vehicles and street cars must at all times comply with any direction by voice or hand, of any member of the Police Force, as to stopping, starting, approaching or departing from any place; the manner of taking up or setting down passengers or loading or unloading goods in any place.

Sec. 2. Ignorance of these rules shall furnish no excuse for disregarding them.

**Copies of these rules can be obtained at the Bureau of Street Traffic and at all Police Stations.**

For further particulars see Charter of the Greater City of New York, Penal Code, Sanitary Code and City Ordinances.

All drivers of vehicles are required to comply with these rules in order to facilitate traffic, prevent blockades, avoid accidents and loss of life, and diminish the loss of time and money due to the lack of observance of rules for the regulation of street traffic. The Police Force will strictly enforce the foregoing rules.

**Complaints against drivers of cabs and other numbered vehicles should be made at the nearest Police Station for record at the Bureau of Street Traffic.**

**THEO. A. BINGHAM,**

**Police Commissioner.**

February 8th, 1909.

to immediately stop and shut off the power if desired, and remain stationary so long as may be necessary to allow said horse or other domestic animal to pass. This provision shall apply to motor vehicles going either in the same or in an opposite direction. This is a State law in many, if not all, the States, except the part about shutting off the power, and while it is a fact that a motor vehicle passing a horse quickly is apt to scare him less than if it stops or slows down, the driver of the horse should know better as to what should be done to get the horse safely by than the driver of the motor vehicle, who has no acquaintance with the horse which the other man is driving. It is therefore best that all drivers of horses and of automobiles should know that this law exists, though it is not always possible to apply it in city streets.

ART. III., Sec. 2 This section is necessary in New York because of the city's long and narrow shape. In other cities and towns it should be omitted, or some other regulation substituted for it.

ART. IV. These general rules are laid down. (For details in regard to speed, see City Ordinance and State Laws.) Uniform laws should be made. A greater speed limit should be allowed on

country roads, of course, than where the population is dense, but this should be a uniform one, except where steep hills, sharp turns, narrow roads or some other reason for extra caution occurs. Such places should be marked by signs with directions. In the country there are many roads which, on account of their narrowness, steepness, or the fact that there is a steep bank on one or both sides, a precipice or something else, are absolutely unfit for automobiles or motor cycles to use, as they cause extreme and unnecessary danger to those using horses. These roads should be marked by signs prohibiting their use by automobiles or motor cycles, and every city, town and village should have the right, and carefully exercise it, of prohibiting their use by automobiles and motor cycles or of regulating speed where it is deemed advisable. The legal speed limit for bicycles and automobiles should be higher than that for horses, because they can be stopped more quickly, and greater speed can be allowed them with equal safety. The majority of accidents that occur through their use in cities are caused by their being on the wrong side of the road, crossing over on a diagonal or turning street corners to the left without passing around the point of intersection (see diagrams) and not by their

exceeding the speed limit. These violations of the rules should be very severely punished. (See Part III. of this book, article entitled "National Speed Regulations Proposed for Motor Vehicles, Bicycles and Horses"; also article on "Automobile Road Signs.")

ART. VI., Secs. 1 and 2. These are reasonable precautions. The neglect of them has brought about more accidents than any other cause, and when they do occur they are usually very bad ones. No one should be allowed, for the sake of his own comfort or the saving of a little time or labor or money, to endanger the life or property of others, and if he does so he should be held strictly responsible for injuries sustained. These sections put the responsibility where it belongs.

Sec. 3. That any one could be so stupid as to remove a wheel from a handsome cab with the horse still attached to it is almost beyond belief, but it was recently commonly done on Broadway between Fiftieth and Fifty-first streets and other places. This section has been framed to protect the public from such practices.

ART. VII., Sec. 1. Vehicles so constructed that the driver cannot see properly have been a nuisance and a menace to safety for years. This section is designed to place the burden of proof on the owner or driver that he did have "a sufficient view," etc., in case an accident does occur from his not seeing. This rule will tend to make people who own such vehicles have them altered and also to prevent similar vehicles from being built in the future.

Sec. 2. Projecting articles, sticking out behind or on the side, like pipes, timber, etc., are dangerous. Whenever it becomes necessary to transport such things, larger or wider than the vehicle, there should be an extra man or men by the projecting objects to

warn the public against them, and the pace should be slow. In any case, the person responsible for such load should also be responsible for any accident that it may occasion.

Sec. 3. There is no reason why countless people should be made uncomfortable through the laziness and thoughtlessness of a few.

Sec. 5. Besides being dangerous, this practice often results in spoiling the paint and varnish on the back of carriages.

ART. VIII., Secs. 1 and 2. These matters should be attended to by the police. They should not wait for a complaint by the A. S. P. C. A. or any individual, but should act at once and without solicitation.

Sec. 3. There is no reason for cracking a whip. It causes an unnecessary noise, and is apt to annoy others, and should be prohibited.

ART. IX. is explanatory, and it is hoped will prove educational.

I wished to include one other paragraph under this article, but could not get the consent of the Police Department. It was to read as follows:

"Pedestrians on sidewalks should keep to the right, and when stopping do so at one side and not in the way of a street crossing or of people going into or coming out of theatres or other places of assemblage."

I believe this paragraph would result in much good, as the blocking of sidewalks is usually due to the stupidity of pedestrians, and this would tend to make them more careful about getting in each other's way. It would also facilitate the work of the police in keeping sidewalks clear of idlers stopping to see people going into and coming out of places of assemblage.

## LEGAL REFERENCES USEFUL IN ENFORCING THE PROVISIONS CONTAINED IN THE FOLDER ON PAGES 4 AND 5 ENTITLED "STREET TRAFFIC REGULATIONS FOR THE CITY OF NEW YORK."

We have:

**First: Certain provisions of the Charter of the Greater City of New York.**

**Second: A certain provision of the Sanitary Code.**

**Third: Certain provisions of the Penal Code.**

**Fourth: An Ordinance in relation to the "Rules of the Road," passed December 14, 1903.**

The most important of these are Sec. 315 of the City Charter, which says: "*It is hereby made the duty of the Police Department and Force . . . to regulate the movement of teams and vehicles in streets, bridges, squares, parks, and public places,*" and Sec. 472, of Art. VII., of the Ordinances, as follows: *Police to Regulate Traffic. "The Police Department shall have all powers and duties in relation to the management of vehicular traffic."*

The above seem to provide all the power necessary to regulate street traffic; but I hereby give in detail all of the legal references to the folder, and follow them with a list of each Article and Section of the folder, with its particular legal references, so that whenever any provision of the folder is disobeyed reference can immediately be made to each law bearing on the case.

**First: Certain Provisions of the Charter of the City of Greater New York.**

Section 1455 provides "that wagons meeting shall go to that side of the street on the right of each."

Note D to Section 1455, Second Edition, Ash: "A street car has the right of way except on street crossings, where its rights are the same as those of other vehicles."

Section 315 says: "It is hereby made the duty of the Police Department and force . . . to regulate the movement of teams and vehicles in streets, bridges, squares, parks and public places."

*The proposed new revision of the Charter, page 65, contains the following, which is to take the place of Section 315 of the old Charter:*

"No. 146. *Subject to the provisions of this act, the administrative code and other laws, the Commissioner (of police) shall have power:*

*"To direct, control, restrict and regulate, in the interests of public safety, health and convenience, the movement of pedestrian, animal and vehicular traffic of every kind in streets, parks and public places, and to make regulations in regard thereto."*

*This is a great step in advance, and, if enacted, would leave no doubt as to the power of the Police Department to be absolutely independent of any City Ordinances and to require no assistance from the Board of Aldermen, as there is ample law without it, as is supposed, the City Charter takes precedence of the City Ordinances. In the mind of the Commissioner of Police there seemed to be a doubt as to his authority to control pedestrian traffic on the sidewalks, but nothing could be plainer than the wording of the new paragraph.*

**Second: A Certain Provision of the Sanitary Code.**

Section 8 provides "that no person shall do, or contribute to the doing of any act dangerous to life or detrimental to health, nor omit to take any reasonable and proper precaution to prevent danger or detriment to life or health."

**Third: Certain Provisions of the Penal Code of the State of New York.**

### TITLE XVI.

Sec. 655. *Overdriving animal; failure to provide proper sustenance.*—A person who overdrives, overloads, tortures, or cruelly beats or unjustifiably injures, maims, mutilates, or kills any animal, whether wild or tame, and whether belonging to himself or to another, or deprives any animal of necessary sustenance, food or drink, or neglects or refuses to furnish it such sustenance or drink, or causes, procures, or permits any animal to be overdriven, overloaded, tortured, cruelly beaten, or unjustifiably injured, maimed, mutilated, or killed, or to be deprived of necessary food or drink, or who willfully sets on foot, instigates, engages in, or in any way furthers any act of cruelty to any animal, or any act tending to produce such cruelty, is guilty of a misdemeanor.

Sec. 669. *Definitions.*—2. The word "torture" or "cruelty" includes every act, omission, or neglect whereby unjustifiable physical pain, suffering, or death is caused or permitted.

Sec. 432. *Ambulances.*—A person who willfully stops or obstructs the passage of any ambulance or vehicle used for the transportation of sick or wounded persons or animals, upon any public street, highway, or place, or who willfully injures the same, or willfully drives any vehicle into collision therewith, is guilty of a misdemeanor. All sheriffs, constables, and police officers must, when called upon by the person in charge of such ambulance or

# POLICE DEPARTMENT Rules for Driving and the Regulation of Street Traffic

ISSUED BY THE POLICE DEPARTMENT OF THE CITY OF NEW YORK

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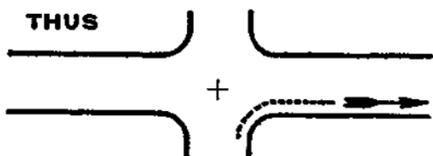
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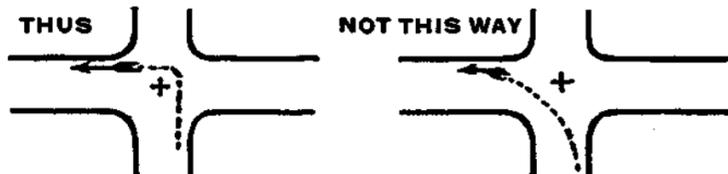
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Sec. 8. No vehicle shall stop with its left side to the curb except on established cab, hack and truck stands, and in streets where and when one-way traffic is directed by white arrow signs.

Sec. 9. No vehicle shall stand backed up to the curb except when actually loading or unloading, and if said vehicle is horse-drawn and has four wheels, the horse or horses must stand parallel to the curb and faced in the direction of traffic, but no vehicle shall stand so backed up if it interferes with or interrupts the passage of other vehicles or street cars.

Sec. 10. No vehicle, unless in an emergency or to allow another vehicle or pedestrian to cross its path, shall stop in any public street or highway, except near the right-hand curb thereof and so as not to obstruct a crossing.

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Sec. 1. No vehicle shall proceed at any time at a greater speed than the law allows and is safe and proper under the conditions then obtaining.

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Sec. 1. No horse shall be left unattended in any street or highway unless securely fastened or unless the wheels of the vehicle to which he is harnessed are securely tied, fastened or chained, and the vehicle is of sufficient weight to prevent its being dragged at a dangerous speed with wheels so secured.

Sec. 2. No horse shall be unbitted in any street or highway unless secured by a halter.

Sec. 3. No one shall remove a wheel, pole, shaft, whiffle-tree, splinter-bar or any other part of a vehicle or any part of a harness, likely to cause accident if the horse or horses start, without first unhitching the horse or horses attached to said vehicle.

Sec. 4. No one shall cease to hold the reins in his hand while riding, driving or conducting a horse.

## Article VII. Vehicles.

Sec. 1. No one shall drive a vehicle that is so covered in or constructed as to prevent the driver thereof from having a sufficient view of the traffic following and at the sides of such vehicle.

Sec. 2. No one shall drive or conduct any vehicle in such condition, so constructed, or so loaded as to be likely to cause delay in traffic or accident or injury to man, beast or property.

Sec. 3. No one shall so load a vehicle, or drive a vehicle so loaded, with iron or other material that may strike together without its being properly "deafened" so as to cause no unnecessary noise.

Sec. 4. No one shall drive a public, numbered, licensed or business vehicle, who is less than sixteen years of age.

Sec. 5. No one shall ride upon the rear end of any vehicle without the consent of the driver, and when so riding no part of the person's body shall protrude beyond the limits of the vehicle.

## Article VIII. Condition and Treatment of Horses.

Sec. 1. No one shall ride or drive a horse not in every respect fit for use and capable for the work upon which it is employed and free from lameness or sores calculated to cause pain, or any vice or disease likely to cause accident or injury to person or property.

Sec. 2. No one shall ill-treat, over-load, over-drive, over-ride or cruelly or unnecessarily beat any horse.

Sec. 3. No one shall crack or so use a whip as to annoy, interfere with or endanger any person or excite any horse other than that which he is using.

## Article IX. The Respective Rights and Duties of Drivers and Pedestrians.

The roadbeds of highways and streets are primarily intended for vehicles, but pedestrians have the right to cross them in safety, and drivers of vehicles and street cars must exercise all possible care not to injure pedestrians. Pedestrians should, on their part, never step from the sidewalk to the roadbed without first looking to see what is approaching, and should not, needlessly, interfere with the passage of vehicles or street cars.

By crossing a street as nearly as possible at right angles, preferably at a regular crossing, and when a traffic policeman is stationed there, by waiting for his signal, pedestrians will greatly add to their own safety, facilitate the movement of traffic, and make it much less difficult for the horses, which often have to be reined in suddenly and painfully to avoid careless and unthinking pedestrians. Nothing in the foregoing should excuse drivers from constant vigilance to avoid injury to pedestrians under all conditions.

## Article X. Definitions.

Sec. 1. The word vehicle includes equestrians, led horses and everything on wheels or runners, except street cars and baby carriages.

Sec. 2. The word horse includes all domestic animals.

Sec. 3. The word driver includes the rider and driver of a horse, the rider of wheels and the operator of a motor vehicle or street car.

## Article XI. Obedience.

Sec. 1. Drivers of vehicles and street cars must at all times comply with any direction by voice or hand, of any member of the Police Force, as to stopping, starting, approaching or departing from any place; the manner of taking up or setting down passengers or loading or unloading goods in any place.

Sec. 2. Ignorance of these rules shall furnish no excuse for disregarding them.

**Copies of these rules can be obtained at the Bureau of Street Traffic and at all Police Stations.**

For further particulars see Charter of the Greater City of New York, Penal Code, Sanitary Code and City Ordinances.

All drivers of vehicles are required to comply with these rules in order to facilitate traffic, prevent blockades, avoid accidents and loss of life, and diminish the loss of time and money due to the lack of observance of rules for the regulation of street traffic.

The Police Force will strictly enforce the foregoing rules.

**Complaints against drivers of cabs and other numbered vehicles should be made at the nearest Police Station, for record at the Bureau of Street Traffic.**

**THEO. A. BINGHAM,**  
Police Commissioner.

February 8, 1909.

vehicle, aid in placing sick or wounded persons or animals therein, and in enforcing the provisions of this section.

*Consolidation Act of the City of New York.* Sec. 1,938 (Laws of New York, 1882, Chap. 140, Laws of 1883, Chap. 276). *Salting Railway Tracks in the City of New York.*—Every person who shall throw, expose, or place, or who shall cause or procure to be thrown, exposed, or placed in or upon any such street, highway, or public place, except upon the curves, crossings, or switches of railroad tracks, any salt, saltpetre, or other substance for the purpose of dissolving any snow or ice which may have fallen or been deposited thereon, shall be guilty of a misdemeanor.

*Consolidation Act of the City of New York.* Sec. 1,938 (Laws of New York, 1882, Chap. 410, Laws of 1883, to *Animals.*—The police force of the City of New York as well as of all other places where police organizations exist, shall, as occasion may require, aid the Society, its members or agents, in the enforcement of all laws which are now, or may hereafter be, enacted for the protection of dumb animals.

Penal Code, Sec. 117. *Neglect of Duty by Public Officer.*—A public officer, or person holding a public trust or employment, upon whom any duty is enjoined by law, who willfully neglects to perform the duty, is guilty of a misdemeanor. This and the preceding section do not apply to cases of official acts or omissions, the prevention or punishment of which is otherwise specially provided by statute.

Penal Code, Sec. 154. *Omission of Duty by Police Officer.*—Where any duty is or shall be enjoined by law upon any public officer, or upon any person holding a public trust or employment, every willful omission to perform such duty, where no special provision shall have been made for the punishment of such delinquency, is punishable as a misdemeanor.

Penal Code, Sec. 15. *Punishment of Misdemeanors When Not Fixed by Statute.*—A person convicted of a crime declared to be a misdemeanor, for which no other punishment is specifically prescribed by this Code, or by any other statutory provision in force at the time of the conviction and sentence, is punishable by imprisonment in a penitentiary or county jail, for not more than one year, or by a fine of not more than five hundred dollars, or by both.

#### **Fourth: An Ordinance in Relation to the Rules of the Road.**

Be it Ordained by the Board of Aldermen of The City of New York as follows:

##### **ARTICLE I.—RULES OF THE ROAD.**

SECTION 435. *Vehicles Keeping to the Right.*—Vehicles shall keep to the right, and as near the right-hand curb as possible.

SEC. 436. *Vehicles Meeting.*—Vehicles meeting shall pass each other to the right.

SEC. 437. *Vehicles Overtaking Others.*—Vehicles overtaking others shall, in passing, keep to the left.

SEC. 438. *Turning and Starting.*—The driver or person having charge of any vehicle, before turning the corner of any street or turning out or starting from or stopping at the curb line of any street, shall first see that there is sufficient space free from other vehicles, so that such turn, stop or start may be safely made, and shall then give a plainly visible or audible signal.

SEC. 439. *Turning to the Right Into Another Street.*—A vehicle turning to the right into another street shall turn the corner as near to the curb as practicable.

SEC. 440. *Turning to the Left Into Another Street.*—A vehicle turning to the left into another street shall pass to the right of and beyond the centre of the street intersection before turning.

SEC. 441. *Crossing Streets.*—A vehicle crossing from one side of the street to the other shall do so by turning to the left, so as to head in the same direction as the traffic on that side of the street.

SEC. 442. *Stopping at Curb.*—No vehicle shall stop with its left side to the curb.

SEC. 443. *Driving, Backing, etc., on Sidewalks.*—It shall not be lawful for any public cartman, or for any person driving or having charge of any public cart, wagon or other vehicle, to drive or back any such public cart or any other cart, wagon or other vehicle, onto the sidewalk of any of the streets of said City, except as hereinafter provided, or to stop any such cart, or any other vehicle, on any of the crosswalks or intersections of streets so as to obstruct or hinder the travel along such crosswalks or intersection of streets, or to place any such carts or other vehicles crosswise of any streets of said City except to load thereon or unload therefrom; but in no case shall it be lawful for any person to permit such cart or other vehicle to remain so crosswise of any street for a longer period than may be actually necessary for such purpose; but it shall be lawful for the owner or occupant of any store, warehouse or building in

any street or avenue in which the rails of any railroad company are laid so close to the curbstone as to prevent the owners or occupant from keeping any such cart or other vehicle in the carriageway in front of his place of business without interference with the passing cars of any such railroad company to occupy with such cart or other vehicle during business hours so much of the sidewalk as may be necessary for such cart or other vehicle, provided that sufficient space be retained for the passage of pedestrians between the cart or other vehicle so permitted to occupy such portion of the sidewalk and the stoop or front of every such store, warehouse or other building. In no case shall it be lawful to place any such carts, wagons, or other vehicles crosswise of the carriageway on Broadway or Fifth avenue, south of Fifty-ninth street, or on Park row, nor shall any such cart, wagon or other vehicle be permitted to remain in front of any premises on said Broadway or Fifth avenue, south of Fifty-ninth street, or on Park row, unless placed in close proximity to the curb, with the side of such cart, wagon or other vehicle parallel therewith.

SEC. 444. In no case shall a vehicle remain backed up to the curb, excepting when actually loading or unloading.

SEC. 445. *Stopping Close to Curb Line.*—Unless in an emergency or to allow another vehicle (as provided in Sections 16, 17 and 18) or pedestrian to cross its path, no vehicle shall stop in any public street or highway of this City except close to the curb line.

SEC. 446. *Obstructing Crossings.*—No vehicle shall stop, for the purpose of taking or setting down a passenger or loading or unloading freight, or for any other purpose except in case of accident or other emergency, or when directed to stop by the police, in such a way as to obstruct any street or crossing.

SEC. 447. *Stopping Near Corners.*—No vehicle shall stop or stand within the intersection of any street, nor within ten feet of a street corner.

SEC. 448. *Surface Cars Taking on or Discharging Passengers.*—Surface cars shall stop on the far side of the street at the crosswalk to discharge or take on passengers, as amended April 13, 1904.

SEC. 448a. *Right of Way.*—On all public streets and highways of the city, all vehicles going in a northerly or southerly direction shall have the right of way over any vehicle going in an easterly or westerly direction.

SEC. 449. *Right of Way of Certain Vehicles.*—The officers and men of the Fire Department and Fire Patrol, with their fire apparatus of all kinds, when going to, or on duty, at, or returning from a fire, and all ambulances, and the officers and men and vehicles of the Police Department, and all physicians who have a Police permit (as hereinafter provided) shall have the right of way in any street and through any procession, except over vehicles carrying the United States mail. The Police Department is hereby empowered to issue, upon application therefor, a permit for such right of way to any duly registered physician, which permit shall not be transferable.

SEC. 450. *Right of Way of Cars.*—Subject to the preceding section of this article, surface cars running on tracks laid in the streets especially for their use shall have the right of way along such tracks, between cross streets, over all vehicles moving in the same direction at a less rate of speed than ten miles an hour; and the driver of any vehicle proceeding upon the track in front of a surface car shall turn out as soon as possible upon signal by the motorman or driver of the car.

SEC. 451. *Signal in Slowing Up or Stopping.*—In slowing up or stopping, a signal shall always be given to those behind by raising the whip or hand vertically.

SEC. 452. *Signal for Automobile.*—Every person driving an automobile or motor vehicle shall, at the request or signal by putting up the hand, from a person driving or riding a restive horse or horses, or driving domestic animals, cause the automobile to immediately stop, and to remain stationary as long as may be necessary to allow said horses or domestic animals to pass.

SEC. 453. *Slowly Moving Vehicles.*—Vehicles moving slowly shall keep as close as possible to the curb line on the right, so as to allow faster moving vehicles free passage on the left.

##### **ARTICLE II.—SPEED.**

SECTION 454. *Speed of Vehicles.*—The following rates of speed through the streets of the City shall not be exceeded, that is, eight miles an hour by bicycles, tricycles, velocipedes and motor vehicles, however propelled, or by passenger and other vehicles drawn by horses or other animals, except that in portions of the City not built up, where the buildings are at least one hundred feet apart, a speed of fifteen miles an hour may be maintained.

SEC. 455. *Exceptions.*—Nothing in this article shall apply to the apparatus and wagons of the Fire and Police Departments, the

Fire Patrol, ambulances, emergency repair wagons of street railroads, and vehicles carrying the United States mail.

SEC. 456. *Excessive Speed Prohibited.*—No person riding, driving, or in charge of any vehicle on any street, avenue, pathway, or driveway in the City shall drive the same at a speed greater than reasonable and proper, having regard to the traffic and use of the highways, or so as to endanger the life or limb of any person.

SEC. 457. *Speed in Crossing Streets and Turnings.*—No vehicle shall cross any street or avenue running north and south, or make any turn at a speed rate exceeding one-half its legal speed limit.

#### ARTICLE III.—LIGHTS.

SECTION 458. *Lights.*—Each and every vehicle using the public streets or highways of this City, except vehicles of licensed truckmen, shall show, between one hour after sunset and one hour before sunrise, a light or lights, so placed as to be seen from the front and each side; if dash lantern is carried, it shall be placed on the left-hand side; such light or lights to be of sufficient illuminating power to be visible at a distance of two hundred feet; said light or lights shall show white in front, but may be colored on the sides, excepting licensed truckmen. Every automobile shall exhibit during the same period two lamps showing white lights visible at a distance of three hundred feet in the direction toward which the automobile is proceeding, and shall also exhibit a red light, visible in the reverse direction. The lamps shall be so placed as to be free from obstruction to light from other parts of said automobile. In the Borough of The Bronx, excepting south of Tremont avenue and One Hundred and Seventy-seventh street, east of Jerome avenue and west of The Bronx river, and in the Borough of Richmond and Queens, and in the Twenty-sixth, Thirtieth, Thirty-first and Thirty-second Wards of the Borough of Brooklyn, every car or other vehicle between said hours, while moving on, along or standing upon the portion of streets in said boroughs or parts of boroughs, shall also carry a light or lights of such illuminating power as to be plainly visible two hundred feet, both ahead and behind said car or vehicle.

SEC. 459. *Exceptions.*—But this section shall not apply to any equestrian, or to any animal led or driven not attached to any vehicle, nor to the rider of a bicycle, tricycle, or similar vehicle, whose light has become extinguished, or who is necessarily absent from his home without a light, when going at a pace not exceeding six miles an-hour, when a clearly audible signal is given as often as thirty feet are passed over.

#### ARTICLE IV.—IMPROPER USE OF STREETS.

SECTION 460. *Coasting Forbidden to Bicyclists.*—No bicycle shall be allowed to proceed in any street of the City by inertia of momentum with the feet of the rider removed from the pedals.

SEC. 461. *Trick Riding Forbidden.*—No rider of a bicycle shall remove both hands from the handle-bars, or practice any trick or fancy riding in any street.

SEC. 462. *Carrying Children on Bicycles.*—No bicyclist in The City of New York shall carry upon his bicycle any child under the age of five years.

SEC. 463. *Ages of Drivers.*—Drivers or persons in charge of vehicles other than licensed vehicles shall not be less than sixteen years of age, unless provided with a permit from the Police Department.

SEC. 464. *Riding on Back of Vehicles.*—No person shall ride upon the back of any vehicle without the consent of the driver, and when so riding no part of the person's body must protrude beyond the limits of the vehicle.

SEC. 465. *"Cruising" by Hacks, etc., Forbidden.*—No public or private hack, while awaiting employment by passengers, shall stand in or upon any public street or place other than at or upon public or private hackstands, respectively, designated by the Board of Aldermen; nor shall any hackman seek employment by repeatedly and persistently driving his hack to and fro in a short space before, or by otherwise interfering with proper and orderly access to, or egress from, any theatre, hall, hotel, public resort, railway or ferry station, or other place of public gathering, but any hackman may solicit employment by driving through any public street or place without stops other than those due to obstruction of traffic, and may pass and repass before any theatre, hall, hotel, public resort, railway or ferry station or other place of public gathering, provided that after passing such public place he shall not turn and repass until he shall have gone a distance of two blocks beyond such place.

#### ARTICLE V.—USE OF SIDEWALKS.

SECTION 466. *Driving on Sidewalks.*—Except as provided in this article, no horse or vehicle shall be driven, backed, led or al-

lowed to stand on any sidewalk which has been curbed, except that wares or merchandise in process of loading and unloading, shipment, or being received from shipment, may be transferred from trucks or other vehicles over the sidewalk by the use of skids, or by backing up trucks on the sidewalks in so doing, provided a passageway be kept open within the stoop line of buildings for the free passage of pedestrians.

SEC. 467. *Leading Bicycles.*—Riders of bicycles, when dismounted, may lead their bicycles along the sidewalk in single file, and bicycles may be allowed to stand on the sidewalk, provided they are within the stoop line and cause no obstruction.

SEC. 468. *Riding on Sidewalks.*—Bicycles may be ridden on the sidewalks of any street in the suburbs of the City, the roadway of which is not reasonably rideable for such vehicles.

SEC. 469. *Driving Across Sidewalks.*—Nothing contained in this article shall prevent the riding or driving of horses or vehicles from private property directly across the sidewalks of any street to the roadway, or from the roadway back to such private property.

#### ARTICLE VI.—GENERAL RULE COVERING THE USE OF STREETS.

SECTION 470. *Reasonable Care to be Used.*—Nothing contained herein or omitted herefrom shall be construed or held to relieve any person using, or traveling, or being upon any street, for any purpose whatever, from exercising all reasonable care to avoid or prevent injury through collision with all other persons and vehicles.

SEC. 471. *Traffic Not to be Obstructed.*—No vehicle shall be allowed to remain upon or be driven through any street of The City of New York so as wilfully to blockade or obstruct the traffic of that street.

No vehicle shall be so overloaded that the horse or horses are unable to draw it.

#### ARTICLE VII.—POWERS OF POLICE DEPARTMENT.

SECTION 472. *Police Department to Regulate Traffic.*—The Police Department shall have all powers and duties in relation to the management of vehicular traffic.

SEC. 473. *Police Department to See that Ordinances are Posted.*—The Police Department shall see that these Ordinances are posted in all public stables and at the hack, cab and truck stands, and shall keep copies of them at all of its stations and issue them on application.

#### ARTICLE VIII.—DEFINITIONS.

SECTION 474. *Definitions of Terms Used Herein.*—The following terms, whenever used herein, except as otherwise specifically indicated, shall be defined to have and shall be held to include each of the meanings herein below respectively set forth, and any such terms used in the singular number shall be held to include the plural:

*Street.*—Every avenue, boulevard, highway, roadway, cartway, lane, alley, strip, path, square and place used by or laid out for the use of vehicles.

*Roadway.*—That portion of any street which is included between the curbs or curb-lines thereof and is designed for the use of vehicles.

*Curb.*—The lateral boundaries of that portion of a street designed for the use of vehicles, whether marked by curb-stones or not so marked.

*Vehicle.*—Every wagon, carriage, omnibus, sleigh, pushcart, bicycle, tricycle, and other conveyance (except baby carriages), in whatever manner or by whatever force or power the same may be driven, ridden or propelled, which is or may be used for or adapted to pleasure riding or the transportation of passengers, baggage or merchandise upon the street; and every draught and riding animal, whether driven, ridden or led, excepting that an animal or animals attached to any vehicle shall, with such vehicle, constitute one vehicle.

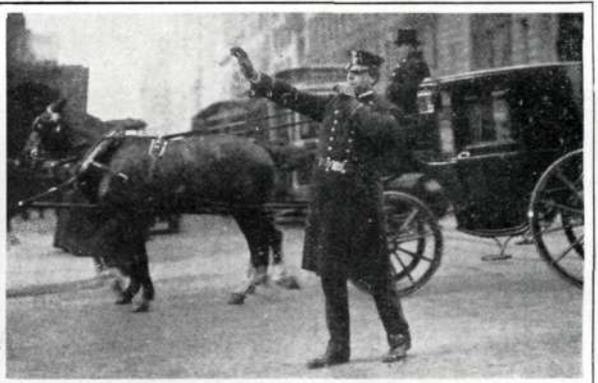
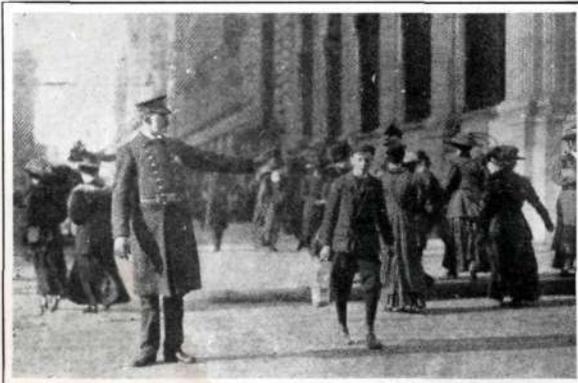
#### ARTICLE IX.—PENALTIES FOR VIOLATIONS.

SECTION 475. *Penalties for Violations.*—Any person violating any provision or regulation hereof shall be deemed guilty of a misdemeanor, and upon conviction thereof by any magistrate, either upon confession of the party or by competent testimony, may be fined for such offense any sum not less than one dollar and not exceeding ten dollars, and in default of payment of such fine may be committed to prison by such magistrate until the same be paid; but such imprisonment shall not exceed ten days.



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FIFTH AVENUE



Courtesy of Leslie's Weekly. Copyright, Judge Co., 1909.

### TRAFFIC INCIDENTS

The following are the references for each Article and Section of the folder on pages 4 and 5, entitled, "Rules for Driving and the Regulation of Street Traffic." (The numbers of the Articles and Sections are in the left hand margin and the references to the right.)

If, for instance, a driver has disobeyed Section 1 of Article III of the folder, we look down the margin at the left for Section 1 of Article III and find to the right of it

the following legal references bearing on the case, viz.:  
 Sec. 449, City Ordinances, and Sec. 432, Penal Code, besides the general references at the top opposite the words Read First.

In this manner it is easy for the officer who makes the arrest and for the magistrate before whom the case is brought to immediately know all the law there is bearing on it and to prosecute or punish accordingly.

<b>POLICE DEPARTMENT OF THE CITY OF NEW YORK</b>	
<b>FEBRUARY 8, 1909</b>	
<b>LEGAL REFERENCES</b>	
<b>RULES FOR DRIVING AND THE REGULATION OF STREET TRAFFIC</b>	
ABBREVIATIONS	
City Charter . . . . .	C. C. Penal Code . . . . . P. C.
Sanitary Code . . . . .	S. C. City Ordinances. . . . . C. O.
<b>TRAFFIC REGULATIONS.</b>	<b>LEGAL REFERENCES.</b>
<b>Read First</b>	Sec. 315 C. C. and Chap. 12, Sec. 472 C. O. refer to entire folder.
	Sec. 8 S. C. and Chap 12, Sec. 470 C. O. refer to a large part of the folder.
	Chap. 12 is referred to in the ordinances unless otherwise specified.
<b>Art. I.</b>	Sec. 435 C. O.
Sec. 1	" 436 " and Sec. 1455 C. C.
" 2	" 437 "
" 3	" 439 "
" 5	" 440 "
" 6	" 441 "
" 7	" 442 "
" 8	" 443-444 C. O.
" 9	" 445-447 "
" 10	" 471 C. O.
" 11	
<b>Art. II.</b>	Sec. 451 C. O.
Sec. 1	" 458-459 C. O.
" 5	
<b>Art. III.</b>	Sec. 449 C. O. and Sec. 432 P. C.
Sec. 1	" 448a C. O.
" 2	" 450 "
" 3	" 443-447 and 471 C. O.
" 4	" 471 C. O.
" 5	" 471 "
" 6	" 471 "
" 7	" 471 "
" 8	" 471 "
" 9	" 471 "
<b>Art. IV.</b>	Sec. 454-456 C. O.
Sec. 1	" 457 C. O.
" 2	
<b>Art. VII.</b>	Chap. 13, Sec. 529 C. O. (Special Penalty)
Sec. 3	Sec. 464 C. O.
" 5	
<b>Art. VIII.</b>	Sec. 471 C. O. and Secs. 655, 668 and 669 P. C. Laws of New York, 1866, Chap. 469, Sec. 7.
Sec. 1-2	
<b>Art. X.</b>	Sec. 474 C. O.
Sec. 1	
<b>Penalties</b>	Sec. 475 C. O.

### CHAPTER III.

#### Signs for Assisting Traffic Regulation and as Warnings of Danger.

In October, 1903, at the same time that I had provided and caused to be issued by the Police Department the

folders of Rules for Driving, I had also caused to be made and put up one hundred blue and white enamel signs 10 inches by 19 inches, as follows:



These did very good service, but were rather small, and about a year afterwards several hundred more were put up of a larger size. They were, however, too large,

poorly made and badly hung, most of them being too low and in the way. The proper size for them is 12 x 23 inches and the wording can be improved as follows:



When possible the signs should be hung on brackets, at right angles to the street, and high enough not to interfere with the tallest vehicle.

These signs are easily seen, and familiarize the driv-

ers, when driving slowly, with the necessity of keeping as near the right hand side of the street as possible, so as to leave the middle of the street free for vehicles moving at a faster rate of speed.

The following sign is for use on streets upon which traffic is to move in only one direction during certain hours (see sec. 5 of Art. III of the Traffic Regulations).



Other signs that would be useful at certain places are :

**TURN TO  
RIGHT HERE**

**KEEP TO RIGHT  
AROUND CIRCLE**

**STANDING  
FOR 4 CABS**

**IN**

**WAITING  
VEHICLES STAND  
HERE**

**OUT**

**GO SLOW**

The signs on country roads in France indicate by words or by certain easily read diagrams, or both, such things as railway crossings, sudden turns, dangerous intersections, steep grades, etc., and they also contain notice of the speed limit prescribed by law through villages, on bridges, and at other places where exceptions

to the general rule are made, or where extra care should be taken. They are a great advantage, but could be improved by being lighted at night. We should have them in this country. (See article in Part III of this book entitled "Automobile Road Signs.")

## CHAPTER IV.

### **Bureau of Street Traffic.—Keeping Records of Infraction of Traffic Regulations, Accidents, Complaints and Arrests.—License Bureau Transferred to Bureau of Street Traffic.—Supervision of Cab Stands and Drivers, etc.—Regulations at Entertainments.—Block System.—Restrictions of Slow-Moving Vehicles.**

A thoroughly equipped Bureau of Street Traffic (See Note 1) is necessary in a large city if efficient and economical control and regulation of Street Traffic are to be maintained. This should be part of the Police Department, but its duties, as far as possible, should be distinct, separate and well defined. It should have its own separate main office at a central point. Branches should be established in whatever police stations are most advantageously and conveniently located, and the main office and the branches should be kept open all night.

All the police regularly required in street traffic duty should be included in the Bureau, and its Chief should call upon the Police Commissioner for extra men on extraordinary occasions, such as processions, etc. The Commissioner in turn should call upon the Chief of the Bureau for a part or the whole of his command on other extraordinary occasions, such as strikes and riots.

One of the most important duties of the Bureau of Street Traffic is the keeping of records of all the drivers who have had to be corrected for disobedience of any of the traffic regulations. Then, when an arrest is made, or a driver is stopped and corrected for a breach of any regulation and the report of the occurrence made at the Bureau, it is easy to refer immediately to the records and find if there has been trouble with him before, and if so, exactly what it was, where and when it occurred, and any other details recorded at the time.

A careful record of all accidents should be minutely kept, both for the purpose of establishing where the fault lies in a particular case and, by tabulating them and finding out why they occur, to devise means, as far as possible, to prevent their recurrence. To keep a satisfactory and efficient record of accidents, complaints, violations and arrests, a set of forms must be adopted. The best forms I have seen are those by the Superintendent of Street Traffic, Mr. Alfred Edward, of Sydney, New South Wales, Australia. The neatness and thoroughness with which these are gotten up is worthy of notice and a great contrast to the cheap printing and paper with which our Police Department is willing to content itself, skimping even in the number which they have printed of these forms and of copies of the Traffic Regulations to such a degree that at times it has been seriously crippled in the performance of its duties, by reason of the supply giving out and carelessness in seeing that it is promptly renewed. Such false economy and neglect is most deplorable. It would be better to cut down the number of men employed on traffic duty than to fail to provide

all such complaint forms, and copies of regulations, as are needed.

The list of these is as follows:

- Report of Arrest.
- “ “ Breach of Regulations.
- “ “ Accident caused by Horse or Vehicle.
- “ “ Unattended Horse or Vehicle.
- Claim for Horse or Vehicle seized by Police.
- Public Vehicles:
  - Report of Unfit Horse.
  - “ “ “ Vehicle.
  - Notice not to use Unfit Horse.
  - “ “ “ “ Vehicle.
- Private Vehicles:
  - Report of Unfit Horse.
  - “ “ “ Vehicle.
  - Notice not to use Unfit Horse.
  - “ “ “ “ Vehicle.

So far, we have but one form. It is a card, 5 x 8 inches, adapted to a complaint on one side and an arrest on the other. This form, useful in many cases, is especially so in keeping a record of drivers of vehicles who overcharge for services. Cab drivers and others may thus be controlled, as once on the list there is a record against them to refer to.

Every police officer should have an outside breast pocket with a flap cover and button in his coat made for a combined note and instruction book, with a loop for an indelible pencil. The little book used in London entitled, “Duty Hints for Constables and Section Sergeants,” and referred to on page 45 in an article on the “Policemen of London,” should be adapted for use in every city. The cover of this combined note and instruction book should be of pliable leather and the note leaves should be made up in thin pads to be replaced as required. The instructions in the London book include almost every conceivable case likely to arise and are extremely concise and easily understood. The note leaves are for use in making records of reprimands, arrests, accidents and complaints, including names and addresses of parties concerned in any infraction of law and of witnesses thereto, license and registration numbers and everything that may pertain to incidents in the performance of an officer's duty.

The work of the License Bureau (Note 2), now in the hands of the Mayor's Marshal (Note 3), and conducted in the most primitive and inefficient manner, should be transferred to the Bureau of Street Traffic of the Police Department.

The Bureau of Street Traffic should have the locating

# Complaint of Citizen against Driver of Cab or Other Numbered Vehicle

\_\_\_\_\_ Precinct \_\_\_\_\_ 190\_\_\_\_\_

Name of Driver _____	License No. _____
Address of Driver _____	Age _____ Color _____ Nationality _____
Kind of Vehicle _____	No. of Vehicle _____
Owner of Vehicle _____	Address _____
Offense (Give Time and Place) _____	Action taken by Police _____
_____	_____
_____	_____

Complainant \_\_\_\_\_ Address \_\_\_\_\_

Witnesses \_\_\_\_\_ " \_\_\_\_\_

\_\_\_\_\_ " \_\_\_\_\_

\_\_\_\_\_ Lieutenant \_\_\_\_\_ Precinct \_\_\_\_\_

This card to be forwarded to the Traffic Bureau.

## This side for ARRESTS ONLY

Date and Time	Name and Residence	Age	Color	Nationality
				If citizen?
License No. of Driver	License No. of Vehicle	Officer		
		Precinct		
Nature of Arrest and Place		Complainant and residence		
		Disposition		
		Magistrate		
		Court		
		Date		
		Lieutenant _____ Precinct _____		

This record will comprise arrests of owners or drivers of licensed numbered vehicles. See General Order No. 38, June 1, 1908.

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and supervising of all cab, hack and truck stands, determining the number of vehicles allowed on each stand, and fixing at each stand a sign showing what the number is.

For instance:



**STANDING  
FOR 7 CABS**

The Bureau should regulate the soliciting of passengers by cab drivers and establish regulations in regard to the distance an unengaged cab may be allowed to go on certain crowded streets during certain hours before turning off to another street.

It should furnish plans for the regulation of vehicles at all places of public assemblage and enforce them. To it notice should be given of large public and private entertainments and it should furnish them with plans for the management of vehicles and men to put them into effect. It should constantly study out plans to simplify traffic at specially congested places, put them in operation and enforce them.

It should carry out the block system wherever necessary. This is now in force in New York, the system having been copied from London. It consists in alternately stopping vehicles on one street to allow those on another street to proceed. (For signals employed see Article II, Section 4 of the Traffic Regulations.) Sometimes one man only is needed for the work, but at certain difficult places, and especially at crowded hours, two, three and even four may be required; the number necessary being largely in proportion to the knowledge of the driving public. (Note 4.)

It has been pointed out in Chapter II that the police

have the power to regulate, restrict, or even exclude trucks, or any other kind of vehicles from certain streets if it may seem to them necessary for the general good. This matter should have proper attention, care being taken to inflict no unnecessary hardship. If, however, the driver of any vehicle takes any more room than he should, or shows a disposition to inconvenience others he should be made to turn down the next side street and his name and number be reported and put on file.

In the introduction to this book will be found a list of many things which should be made possible for the Bureau of Street Traffic to attend to.

#### NOTES ON CHAPTER IV.

NOTE 1.—A study of just how the Bureau is to be perfected should be made. The methods in London and some of those in Paris are worth copying, but so far as I know, the book by Alfred Edward, Esq., Superintendent of Street Traffic in Sydney, N. S. W., Australia, is better than anything else that has been written. The book is called "Traffic Act and Regulations," published in 1902, and is an example of extremely good work. His forms of complaint are models and his work entitled "A Bill to Provide for the Regulation of Motor Vehicles and their Drivers; to amend the Government Motor Omnibus Act, 1905, and for purposes incidental thereto or consequent thereon," is well worth study. I also recommend the "Report from the Select Committee on Cabs and Omnibuses (Metropolis) Bill with Proceedings of Committee, ordered by the House of Commons, to be printed July 31, 1906: Wyman & Sons, Limited, publishers, 109 Fetter Lane, E. C., London." Among other things this contains an interesting treatise on the use of the taximeter. There are also from London, The Metropolitan Public Carriage Act, the Metropolitan Police Guide and the Metropolitan Police Book. These, however, so far as traffic is concerned, have been revised by Mr. Edward in his book.

NOTE 2.—See Chapter VI on Licenses.

NOTE 3.—There is no reason, that I have ever heard advanced, why the Mayor's Marshal in New York City should have anything to do with street traffic, and I presume it is part of the antiquated system of our City Government handed down from the past, and which should be changed immediately. On the other hand, as the Police Department, through its Bureau of Street Traffic, has to regulate the traffic on the streets, it should also regulate everything connected with that traffic. If there are two sources of authority there must be trouble and friction and unsatisfactory results.

NOTE 4.—In Paris a white club about 18 inches long is carried by the policemen on traffic duty. It is very effective in directing the block system, as it is much easier to be seen than the hand.

## CHAPTER V.

### Personnel of the Bureau of Street Traffic.

The Bureau of Street Traffic should have an executive head whose title should be Chief of the Bureau of Street Traffic. This office should be a permanent one, not affected by changes of political parties, and dependent on good service only (See Note 1). It is very important that an efficient man should occupy the position of Chief of the Bureau of Street Traffic, and he cannot be efficient until he has held the position for a considerable time.

It is not possible here to say accurately just how many deputies and assistants the Chief will need, nor how large a clerical force he will require in the office to keep the many necessary records and carry on the daily routine.

This can be arrived at only as the Bureau of Street Traffic is being perfected. (See Note 2.)

#### FOOT POLICEMEN.

The principal duties of men on foot, where the drivers in a city are generally familiar with the traffic regulations as they are in London, and as they can be made to be within a reasonably short time in any city by the use of the folders, posters and signs as shown in Chapter II, are:

FIRST.—To manage the block system as hereinbefore described in Chapter IV.

SECOND.—(See Note 3). To see that drivers do not break the rules. See Chapter II, direction No. 3. (I

call special attention to the provisions of the folder on pages 4 and 5, contained in Article III, Sections 3, 4, 5, 6, 7 and 8, and of Article IV, Sections 1 and 2 and in Article VI, Sections 1, 2 and 3, and in Article VII, Sections 2, 3, 4 and 5, and of Article VIII, Sections 1, 2 and 3. Sections 1 and 2 of this Article are still usually neglected by the police whose duty it is to enforce them. See on page 8, Laws of the State of New York, 1866, Chapter 469, § 7; and Penal Code §§ 15, 117 and 154.)

THIRD.—To exercise careful supervision over cab, hack and truck stands and over drivers of all numbered, registered, licensed and public vehicles, especially the drivers of cabs and hacks.

FOURTH.—To see that traffic is not delayed by vehicles loading or unloading or by being backed up to the sidewalk. In this connection I wish to say, that on crowded thoroughfares the unloading of coal and the loading and unloading of building materials or of anything that makes it necessary to back up to the curb, should be prohibited except during certain hours, and that a list of these exceptions should be prepared by the Traffic Bureau and put on the reverse side of the standards (See Note 4) referred to in Chapter I.

#### MOUNTED POLICEMEN.

I do not believe I can better define the duties of mounted men in traffic duty than by quoting part of my letter of recommendations to the Deputy Commissioner in charge of street traffic regulation, March 6, 1906. At that time there had been a foolish use of mounted men where men on foot were quite as good.

"I do not believe there is any use of having a mounted man stationed in one place on a horse or with a horse standing beside him, nor do I believe mounted men should be used on streets with car tracks, except in the line of general supervision. There should be a mounted traffic squad. The Fifth Avenue division of it should consist of enough men to have ten on duty from 7.30 A. M. to 7.30 P. M., one in command and the other nine used for patrol duty, two of them between Washington Square and Twenty-third Street, five between Twenty-third and Sixtieth Streets, and two between Sixtieth and 110th Streets. There should be one mounted man at Columbus Circle in charge of the men on foot in that locality employed in traffic duty. There are wide places along the river front which should have mounted men, usually with authority over the men on foot, on traffic duty in their neighborhood. I think, perhaps, Broad Street should have one mounted man; so should other places that I cannot here enumerate. The mounted men should do patrol duty, keep the lines of traffic separated, make slow moving vehicles keep near the curb, force drivers to take their turns properly, etc. They should generally act as instructors in traffic regulation and at night could be used mounted and on foot at the theatres.

"Except at such places on the streets as I have men-

tioned, in the parks and in the sparsely settled districts where the beats are long, there is little use for mounted men. In the parks there should be an ample force and the men should be specially selected as to their ability in stopping runaways. I do not think the men should be transferred too frequently. The right men should be kept at these duties as long as they are efficient, but as soon as they show signs of laxity they should be shifted immediately. Above all others the men in the Fifth Avenue division should be made as nearly permanent as possible, with equal regard for the fact that while this section is the best training school it also requires the most efficient service.

"Due regard to the smart appearance and bearing of these men should be observed in their selection. Tact in managing drivers is most important. The acquaintance that comes to officers steadily employed at a certain place with the drivers in that locality is of great value, for they soon begin to know who are the offenders and are thus the more readily able to bring them to punishment. We must rely for practical and lasting results on the education of the drivers in traffic regulation. In London the drivers themselves are the most efficient regulators of street traffic, and this is because they know their rights and resent having any one interfere with them."

Since writing the above, I have been impressed, through careful observation, with the work of the mounted squad, and I am inclined to think that I have understated the number of mounted men that can be economically employed.

#### BICYCLE POLICEMEN.

The value of bicycle and motorcycle policemen in traffic duty is largely due to the fact that they, more easily than others, can catch people who are over-speeding, consequently they are of inestimable service in the regulation of suburban service and park traffic. Again, owing to their being able to work quickly, they can be utilized in general supervision of traffic conditions, can be dispatched from the Bureau of Street Traffic or police stations to assist in making an arrest and can be employed in numerous other ways.

The duties of officers employed in traffic regulation should not seriously interfere with their other duties. In fact, when so employed they are placed where they can be most easily found in case of emergency, and are quite as useful as though on ordinary patrol duty in the locality in which they are stationed.

#### NOTES ON CHAPTER V.

NOTE 1.—Who should be the official judges of what constitutes good service is a matter for consideration. The Chief of the Bureau of Street Traffic should not be removable by the Mayor or by any other one official. With our inefficient and corrupt city government it is a difficult thing to define just how he should be appointed or discharged. If no better plan can be found, two or more men could be nominated by the Commissioner of Police and their names submitted to the Mayor and to the Chamber of Commerce for approval. If one of these names is not approved by both the

Mayor and the Chamber of Commerce, then others could be handed in by the Commissioner of Police until one satisfactory to both parties has been found. If more than one name should be considered satisfactory then they should be balloted on, the Mayor, the Chamber of Commerce and the Commissioner of Police each casting one vote. If the incumbent of the office should, at any time, prove unsatisfactory to the Commissioner of Police, the Mayor or the Chamber of Commerce, a complaint should be made and his proposed removal put to vote. The revised City Charter should provide a plan for this.

NOTE 2.—In April, 1904, a Bureau of Street Traffic was established in New York, but by more thorough organization could attain greater efficiency. The only rational way to start anything new is first of all to find out what has already been done elsewhere

and improve on that if possible, but to start without any such knowledge and without making an effort to obtain it, as has been the case with the Bureau of Street Traffic, is likely to result in only a very small measure of success, and an expense very large in proportion to the results.

NOTE 3.—All the police should unite in the enforcement of traffic regulations, whether specially detailed to traffic duty or not. They should make their report at the station to which they are attached and these reports should be tabulated at the Bureau of Street Traffic.

NOTE 4.—Any new rule or regulation or notice of introduction of any new special plan or change of plan at any place, should be posted on the reverse side of the standards.

## CHAPTER VI.

### The License Bureau and the Granting of Licenses.

The duties of the License Bureau include the supervision of drivers, horses, vehicles and harness, which should conform to certain standards. On application for a license a driver should be obliged to show that he thoroughly understands the Rules for Driving and Street Traffic Regulation and should pass an examination as to his ability to drive safely the kind of vehicle for which he wants the license. It does not follow that if a man can drive one horse he can drive a pair or a tandem or a four, nor does it follow that because he can operate an electric automobile he can be intrusted with a gasoline or steam automobile. The licenses should, therefore, be graded and the fees for these also, as it is more expensive to examine an applicant for the more difficult vehicles than for the easier ones. There is nothing, however, to prevent an applicant qualifying to drive every kind of a vehicle if he pays the fee and passes the examination. *Provision should be made for suspension and repeal of license. By this means only can drivers who willfully disobey the traffic regulations be controlled. Suspension or repeal of license is better than a fine or imprisonment, though a fine sufficient to defray expenses should be imposed. A fine does not reach all alike. Some are willing and can afford to pay (for their fun of speeding, for*

*instance), but if the license be suspended or repealed the amateur is deprived of his fun and the means of livelihood taken from the professional. All punishments of drivers of public, licensed or numbered vehicles, when no injury has occurred, can be effected by suspension or repeal of the license, together with a fine. When injury to person or property has been caused by the driver of a vehicle the culprit should be made amenable to the law, as he would be if engaged in other occupations. The punishment for driving a vehicle, for which the law specifies that the driver should be licensed, by any one who has not the proper license, or whose license has been suspended or repealed, should be very severe.*

*The punishment for attempting to evade being found by giving a false name or address, for using false numbers or a license belonging to another, should be very severe. The punishment for trying to escape after causing an accident should be most severe.*

Mr. Alfred Edward, of Sydney, N. S. W., in his book, "Traffic Act and Regulation," has treated the subject at length and so carefully, exhaustively and simply that I feel I can do no better than to refer to it those starting or perfecting traffic regulation. (See pages 33 to 43, inclusive, also pages 60 to 93, inclusive.)

## CHAPTER VII.

### Emergency Repair Wagons.

Often a vehicle breaks down and remains in a crowded thoroughfare at a busy time. If an estimate were made of all the delays caused by its presence to other individual vehicles, horses and men, the aggregate time figured out and reduced to dollars and cents might easily come to more than the value of the vehicle itself, and many

times more than the cost of removing it. Emergency repair wagons, preferably automobiles, would be most useful and repay their cost in a short time. Experiments would doubtless develop a repair wagon eminently suitable for the different purposes for which it could be used.

## CHAPTER VIII.

### **Cab, Hack and Truck Stands (See Note 1 in Chapter IV).**

One of the many advantages to be gained by putting the cross-town surface roads under ground, at least through the middle or backbone of the city, say between Second and Tenth Avenues, would be that cab, hack and truck stands could be located in the center of the wide cross streets, such as Canal, Fourteenth, Twenty-third, Thirty-fourth and Forty-second Streets. (See article in Part III of this book entitled "Street Traffic and Civic Transportation.")

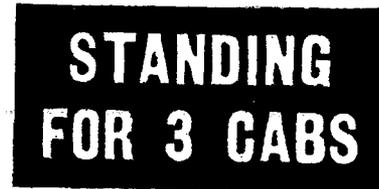
The best that can be done now to relieve the situation is to utilize the available places hereinbefore alluded to, those near the Grand Central Station and those in Fifty-seventh and Seventy-second Streets.

It seems absolutely necessary, unless the crosstown roads are put under ground (notwithstanding the fact that it is not fair to put cab stands next to the curb in front of private property) to put two cab stands in each cross street just back of the Fifth Avenue building lines, from Washington Square up to Fifty-ninth Street, and perhaps further, except in Fourteenth, Twenty-third, Twenty-fourth, Twenty-fifth, Twenty-sixth, Thirty-fourth, Forty-second and Fifty-ninth Streets. In Fifty-seventh Street there is room to put the cab stands in the middle of the street. In the other streets the stands should be on the North side of the streets east of Fifth

Avenue, and those on the streets west of Fifth Avenue should be on the South side of the streets. This is because the vehicles standing would be headed towards the avenue and with the traffic of the street, but in case of high wind or cold storms it should be permitted to cross the street and turn the vehicles in the opposite direction to avoid cruelty to the horses.

Three cabs to each stand should be the limit of these stands, except in the middle of Fifty-seventh Street, where the number should be unlimited, as there is nothing to prevent them extending to the rivers if required.

Each of these cab stands, except that on Fifty-seventh Street, should have a sign indicating the number of cabs allowed on it.



(See Chapters III and IV.)

## CHAPTER IX.

### **Refuges or Isles of Safety.**

Refuges or isles of safety are raised places in the roadway of a street, usually from three to five feet wide by ten to fifteen long, intended to afford safe retreats for pedestrians in crossing crowded thoroughfares. They also serve in dividing traffic. There is usually only one line of refuges in the center of the street, but in some extremely wide streets like the Champs Elysées in Paris, there are two lines, thus dividing the street into three parts, the center part being used for vehicles moving at a greater speed than those on the sides.

The Champs Elysées would be better if divided into four parts by three lines of refuges, for, as it is now, the central part being used by fast moving vehicles going in both directions, it is very difficult to cross. There should therefore be either one or three lines of refuges, but never two lines, as two lines divide the street into three lanes, and the center lane is used by vehicles moving in both directions, and consequently very dangerous to cross.

The ends of the refuges nearest the cross streets should be placed from three to six feet back of the curb line of the cross streets, so as to allow a little more width

for vehicles crossing and for those turning than there is in the cross streets themselves. Especially is this desirable when an electrolier is to be placed on the intersection of the center lines of the streets, as the electrolier with the circular curb around it must take out at least three or four feet from the width of each of the streets upon the intersection of which it is situated. Electroliers so placed not only light the intersections of the streets in the best way, but they serve to make the drivers turn properly around them instead of cutting diagonals.

#### THE FORM OF REFUGE.

The first thing to be determined is how much width can be spared from the streets for the refuges. The length should not be less than eight feet nor more than fifteen feet under ordinary circumstances.

The best form is that of a parallelogram with elliptical ends. This is so, because if there is as much difference between the major and the minor axes as is necessary in the usual proportions of an elliptical refuge, the ends

would be too pointed to look well or to afford sufficient standing room for pedestrians. For example, if we build a refuge three feet wide and twelve feet long, we might decide upon an ellipse with the minor axis three feet and the major axis six feet, and, having cut across and drawn it apart six feet, join the extremities with a straight line on each side six feet long. This would give a good proportion, but any greater difference between the major and minor axes than two to one is bad, and less rather than more is to be preferred. The reason for making a refuge with an elliptical rather than with a round end is obvious, as a vehicle in hitting it will strike a more glancing blow and it will be less dangerous to the vehicle and its occupants, and also to the refuge itself, and to the pedestrians on it.

Again, looking at the vertical construction of a refuge, its curb should be the height of an ordinary step, that is from five to eight inches above the road bed.

Each end of the refuge should be protected by a post, starting at the level of the road bed and extending up to the top of the curb vertically, but from this level it should tumble home sufficiently to make it impossible for the hub of a wheel to strike it before the wheel is deflected by the tire.

The primary object of refuges is to afford safety to pedestrians, but they should be so constructed as to offer the least practical obstruction and danger to horses and vehicles. The directions given cover these points.

When an electrolier at the intersection of the central lines of the streets is used, those on the refuges can be dispensed with to advantage, as it leaves more room for pedestrians.

The ends of the refuges in Paris are round. My recollection of those in London is that they are elliptical. Those that have been erected in New York have been put not only too far from the crosswalks, but have been constructed with regrettable ignorance of their real object. The ends are round and on the sides low granite posts have been put up extending outside the curb line. These posts are continually being knocked off. How

much damage has been needlessly done to vehicles in striking them it is impossible to say. It must, however, have been considerable, as no vehicle could break them off without damage to itself, and probably many vehicles have been injured which did not damage the posts at all. Besides injuries to vehicles the width taken from the streets for refuges is measured by the greatest width of the refuges which in the case of those on New York's streets is outside of the posts. In other words the width from curb to curb of the refuges might just as well have been as great as that from the outside of the posts on one side of the refuges to the outside of those on the other side. The design of the refuges in New York would have been extremely good artistically were it not for the fact that nothing is good that is not suitable for the purpose for which it is intended.

Less space would have accommodated refuges of practical shape, affording better protection to pedestrians, causing less damage to vehicles, and sustaining less injury to themselves. They could have been made just as beautiful and pleasing to the eye, if the designer had taken the trouble to give the practical side a little thought before he started his work.

Some objection to refuges on Fifth Avenue has been made by the Fire Department, but as the roadbed is being increased from 40 feet to 55 feet, refuges 3 feet wide would leave 26 feet between them and the sidewalks. As vehicles drawn up to the curb would occupy not more than from 6 to 7 feet there would be a passageway 19 or 20 feet wide for the fire apparatus. Besides this, the refuges would be located near the ends of the blocks, where vehicles do not usually stand at the curb. I do not think refuges should be used in streets not amply wide except at such places as the intersection of Fifth Avenue and Broadway, and I believe the Fire Department's objections should be given due consideration. However, since the mistake of widening Fifth Avenue too much has been made, I see no way of making it safe for pedestrians except by the use of refuges. (See diagram following page 24 in Part II.)

## CHAPTER X.

### Review of Preceding Chapters and Directions as to How to Begin Street Traffic Regulation.

I assume that the reader, having gone thus far, has been convinced of the absolute necessity for instructing drivers in Street Traffic Regulation before anything worth while can be accomplished in an economical way—in a word, that it is impossible to regulate matters of this kind except by brute force, unless those to be regulated are informed as to what you expect them to do.

I recommend as the first step that the folders, shown in Chapter II, be freely distributed among drivers, and that the regulations printed on heavy cardboard (see form

between pages 6 and 7) be put up in all public stables and garages, and also on iron and bronze standards at cab stands and other prominent places. This alone will soon familiarize drivers with the regulations, which is the most important step of all, and will cost but very little. The price of 100,000 folders is about \$200, and of 1000 cardboard posters about \$15. For New York all the laws bearing upon the folder have been looked up and tabulated for use with it. In all cities, it will be found that there are laws which in the majority of cases can be made to apply, and these should be looked up and tab-



BICYCLE MEN OF TRAFFIC SQUAD



STOPPING A VIOLATOR OF TRAFFIC REGULATIONS

ulated as I have done for New York. I would not, however, advise delay for any new laws to be passed. When there are no laws that specifically apply, their lack may or may not ever be felt. All the regulations in the folder are founded on common sense, and are for the public benefit. Laws, when needed, can be passed. It is better to have too few laws than to have bad or complicated ones, as for example, the plan which I first tried, of getting proper ordinances passed by the Board of Aldermen, was a mistake and a waste of time.

The use of the folder will soon get the majority of the drivers strongly in favor of the Traffic Regulations, and public opinion will back up whatever is needed in the way of legislation. The best legislation that can be passed is that which gives the Police all necessary powers to regulate street traffic, such as Sec. 472 of Article VII of the Ordinances, and Sec. 315 of the New York City Charter. Laws to fit each case, then, are not necessary. If the Police Department is empowered by law to regulate traffic it must make such regulations, and take such steps as are necessary to enable it to fulfill its duties. (See Chap. II for directions in the use of the folder, and other means for instruction in traffic regulation.)

The second step I recommend is that a complete, but very simple record, easily referred to, be kept of all accidents, arrests, and reprimands. (See Chap. IV.)

All other steps necessary for perfect street traffic regulation (see preceding chapters) will follow in due course, but if only the two steps I here recommend be intelligently put into practice most of the trouble will be over.

***Above all, it is to be remembered that the drivers themselves are the best regulators of street traffic when they know the regulations, and what their rights are.***

Many cities, induced by the success in New York, have lately adopted traffic regulations. There has been a good deal of difference, however, in the way they have proceeded, and I give here a few examples:

Lexington and Louisville, Ky., have gone about it in the most sensible way of all. They have adopted the New York regulations practically verbatim, making a few slight changes where local conditions seem to require them, and leaving new things to be added until they have tested what was already in use, and until they had had a chance to have some practical experience before adopting them.

Boston appointed a commission which came to New York and spent two days, afterwards visiting other cities, in which they reported they found nothing which would be of much use to them. On January 1, 1909, they issued a pamphlet of street traffic regulations and rules for driving. This contained practically all of the New York sections, not so well arranged as to order, however, and containing in addition a number of new and rather complicated regulations, some of which have already been modified and eventually may have to be discarded. It is quite as important to know what to leave out as it is to know what to put in, and new regulations adopted by those who have not had much practical experience are rather dangerous. The New York regulations have been the result of long study and observation. Each new clause has been mulled over for a long time before being recommended and introduced, and it is believed that everything that has been adopted is necessary. Brevity and simplicity have been sought, and the regulations are contained in a small folder which is undoubtedly a better form for distribution and for the pocket than a pamphlet or a single sheet.

Baltimore, instead of adopting the New York traffic regulations, took the long-since discarded regulations contained in the New York City Ordinances as a basis and introduced some new clauses of its own, some of which are impossible to carry out.

It is of the greatest importance that all cities should have practically identical traffic regulations, containing only such slight differences as are made necessary by local conditions, and these are very few indeed. The fact that automobiles go from city to city and from town to town so frequently makes this additionally desirable.

I have tried to reach cities contemplating traffic regulations by letter and sending what information seemed necessary, but this is an unsatisfactory method, and I trust that this book may prove a more effective one. Unfortunately, every one seems to think that he knows all about traffic regulation. It is, however, not a simple subject, though it evidently seems so to the uninitiated. Far better would it be if the persons to whom the formulation of traffic regulations is entrusted were willing to take the results of experience as a basis to start with, and when they have acquired a knowledge themselves through experience, it would be ample time to try to inaugurate improvements.

END OF PART I.

## PART II.

# Special Street Traffic Regulation.

**In addition to the general traffic regulations set forth in Part I of this book, there is a necessity for special plans, rules and regulations in certain places and at certain times.**

### CHAPTER I.

#### **Regulations for the Management of Vehicles at large gatherings, such as at and around the Metropolitan Opera House.**

A plan made by the author some years ago for this location and published in the "Rider and Driver," Feb. 10th, 1900, is given as typical. It was first put in operation on the night of November 25, 1903, nearly four years after it was first published, and proved an immediate success, having reduced the time taken to send all the carriages away from the Metropolitan Opera House to less than thirty minutes, and this on the first night of its trial, when formerly it often took an hour and a half. This plan with slight changes is the one now in use. Since it was made, car tracks have been laid in Seventh Avenue and the Maxine Elliott Theatre has lately been built in Thirty-ninth Street, and all the while traffic has been increasing, and, of course, rendering the conditions more difficult to cope with. This is probably the first plan of its kind ever made for the handling of traffic at large gatherings, and it has served as a model for all those that have been made since. The plan is reproduced exactly as first published on February 10, 1900, rather than as revised to date, for no new principles have been advanced since that time, and only minor changes have been made. Improvements in some ways can now be made upon it, as at present operated. Whether the arrangements for the forming and advancing of the lines of carriages can be made more simple is doubtful, but by the increase of the number of indicators of the electric carriage call it will be easier for the drivers to see them and advance more promptly. (See Note 4.) One of the greatest troubles is to procure a cab at the end of a performance when a person has not come in one and ordered it to return, in which case a number is given and it is summoned by the electric carriage call. One way that might answer this purpose is to have requests for cabs given to the operator of the electric carriage call, which could be arranged to show

the words taxameter, four wheeler and hansom, in place of numbers at these times. To provide for furnishing these, a temporary stand could be located before the end of the performance within sight of the electric indicator. When it does not interfere with the line of vehicles, however, perhaps a simpler way would be to locate a temporary cab stand across or in the middle of the street, and the cabs could be summoned by the attendant who opens the carriage doors, by a small megaphone, whistle or bell, and it be allowed to butt in between the carriages of the regular line as required. It is certainly very unsatisfactory as it is now and something should be tried to relieve the situation.

The plans at many of the other theatres are unfortunately very unsatisfactory. Doubtless some of them can be easily improved, while others constitute discouraging puzzles to work out so that any great apparent betterment can result.

Quite as difficult as the problem at and around the Metropolitan Opera House has become that of Forty-second Street. Both this one and the one at Thirty-fourth Street can easily be made much easier to handle by widening the roadbeds of these two streets from 40 ft. to 48 ft. and thus making room for two lines of vehicles instead of one line, as at present, on each side of the car tracks. (See Chapter II for further particulars.) In the future, as we have found out now that we cannot cure some conditions, we should use preventive measures and no theatre should be allowed to be built which has not an exit for the use of returning carriages on a street where there are no car tracks, and even then the number of theatres with exits or entrances near together should be limited within reason, based on experience. The following is the plan herein referred to:

# Suggestions for the Management of Carriages at Entertainments.



In the article published in this journal January 20, 1900, entitled "Reform in Our Street Traffic Most Urgently Needed," it has been said: "The management of carriages at the opera, theatres and other entertainments should be carefully studied, and specially trained, expert and competent police assigned to such duties. Carriages should never be allowed to discharge or take on passengers on the left hand side, but should always proceed in the same direction as the regular traffic of the street."

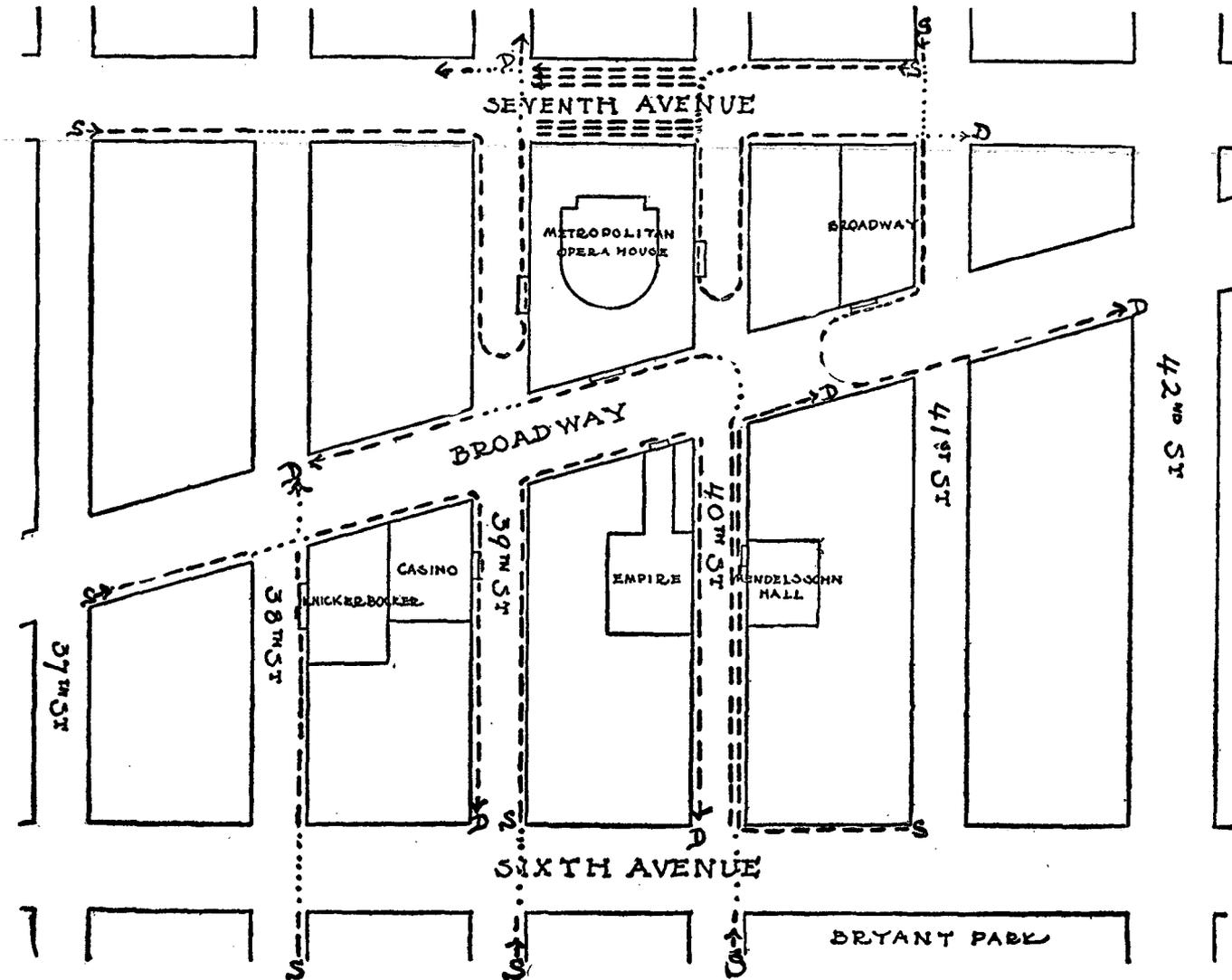
To proceed further; other general rules should be laid down to cover all cases and special ones for the opera, theatres and other entertainments in public places.

Waiting carriages should approach the exit on the right hand side of the street in single line. This line should be formed far

enough away from the exit to prevent congestion of traffic near the door.

At balls and other entertainments where the guests leave at different times, the front of the line should be kept at least 50 feet back from the exit, so that carriages in the line can be called out one by one, by number, and come to the front as required.

At the opera and at theatres, where the audiences leave practically at the same time, the first carriage in the line should be at the exit at the termination of the performance. If the owners are not ready to take it within two minutes from the dropping of the curtain, it should be sent forward to come in again at the end of the line. After that the others should be allowed to block the way for not more than 15 seconds each and then come in again at the back of the line.



S INDICATES START.  
D . . . . . DISPERSAL POINT.

The most difficult problem to handle is that between Thirty-eighth and Forty-first Streets, where the Metropolitan Opera House with three exits, the Knickerbocker Theatre, the Casino, the Empire Theatre, the Broadway Theatre and Mendelssohn Hall are located.

This locality has been selected to show what has been heretofore an almost hopeless tangle and how it can be straightened out.

The Opera and all these theatres do not always end their performances at the same time, but they are liable to overlap each other.

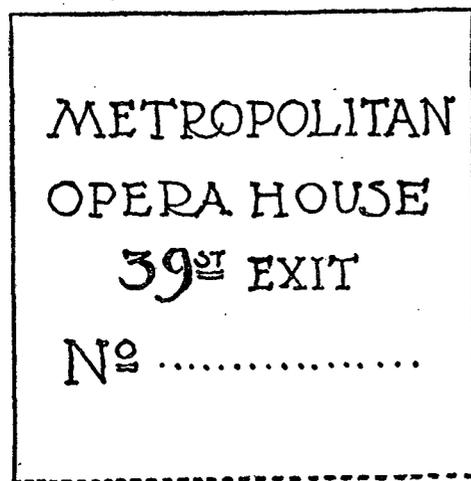
For the sake of the argument it is assumed that they terminate simultaneously.

It will be seen by the diagram where it is proposed that each line shall form in single file for each particular exit, how it shall proceed to the exit and how it shall keep on to the point of dispersal.

A numbered check is now given to the driver of a carriage and to the owner at the entrance, and on the reverse side of this check should be printed the necessary directions.

The form of a proposed check for the Thirty-ninth Street exit of the Metropolitan Opera House is given as an illustration.

To further facilitate speed and convenience an employee of the Opera House or theatre should ascertain the numbers of, say, the first ten carriages in line, and put them in order on a blackboard



CARRIAGE CHECK.

It is evident that all calling of carriages would be unnecessary, except where the people come out at different times, as at balls and receptions, and by the use of a system of transparent numbers this also could be easily obviated. (Note 4.)

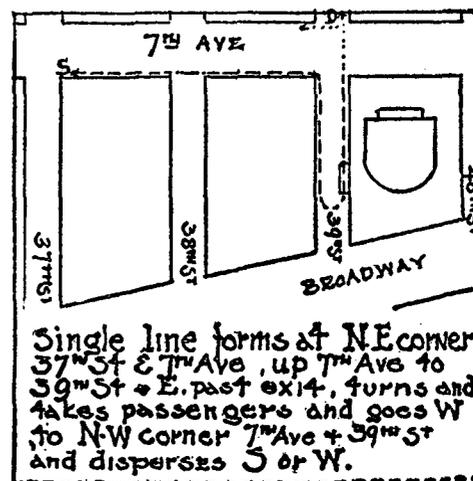
If the proposed plan is adopted doubtless improvements and changes will suggest themselves and result in a short time in a very simple and perfect system.

To successfully carry out this reform, at first a very ample number of officers should be employed to form and keep the lines, prevent cutting in, etc., and keep the street intersections open. Soon the drivers would become accustomed to it and the number of officers be reduced, and finally probably fewer needed than are employed now.

The creation of a new office should be strongly advocated—that of Commissioner or Manager of Street Traffic. The incumbent should be a member of the police force. He should have under him an efficient staff of officers, all the bicycle police and all other police in control of the general traffic of the streets, and of carriages at public and private entertainments.

It should be his duty to keep a record of every traffic accident and its causes.

To him notice should be given of private and public entertain-



REVERSE SIDE CARRIAGE CHECK.

inside the (Note 2) vestibule, and then get the next ten, and so on; or, better still, a keyboard, similar to that of a typewriter, manipulated from the sidewalk, with an indicator inside the vestibule, on which the numbers would show in order. By this arrangement those waiting would know of the approach of their carriages and be ready for them.

If the porte-cochères of the Metropolitan Opera House were taken away (Note 3) and the sidewalk from the Thirty-ninth Street door to the Fortieth Street door, by the way of Seventh Avenue, were entirely covered by a roof projecting several feet over the street, so as to cut off any drip, it would facilitate matters, as several carriages could be filled at the same time. This would also make it easier for people to get out of these doors and the ordinary use of the sidewalk would not be interfered with.

It will be seen by the diagram how Seventh Avenue, between Thirty-ninth and Fortieth Streets, could be used for carriages standing where they could be easily found and taken by the owners. In good weather many prefer to have their carriages stationed where they can find them without waiting for the line.

ments, and he should assign the necessary officers for management of carriages and furnish them with a plan for the same.

To him all complaints should be made and he should be held responsible for all failures to furnish efficient service.

He should have control of all hack and truck stands, of the examination of drivers of numbered vehicles, including motormen and automobilists, and of the issuing of license cards.

He should see that the rules of the road are posted up in all public stables and at the hack and truck stands.

He should furnish special rules and regulations for carriages at each theatre and place of public entertainment, and be empowered to enforce them.

In all cases he should be outranked only by the Chief of Police.

The services that an efficient officer could render in such a position can hardly be overestimated, and his salary should be sufficient to procure the best talent.

NEW YORK, February 10, 1900.

NOTE 1. Large diagrams applying to each theatre or door of theatre or opera house should be placed on the walls of the vestibules, high enough to be seen over the heads of the people standing.

NOTE 2. There has lately been put in the Metropolitan Opera House a mechanical contrivance which accomplishes this very thing, but it takes two men to work it, whereas the one suggested in this article in 1900 could be worked by one man.

NOTE 3. This suggestion, made in 1900, would seem to be equally as valuable now as it was then, and would greatly add to the general comfort, especially on stormy nights. I can see no objection to the

same plan being carried out at all the theatres, and the city should grant the necessary permits.

NOTE 4. A few months after this article was written the electric carriage call was invented and put in general use. This has proved a most valuable device and would be more valuable if, whenever a line of carriages extends back for a long distance or around a corner, there were located an extra indicator so that it could be easily seen by the drivers on each portion of the line. Of course the indicators could all be operated simultaneously from the same switch. In fact, the theatres should be obliged to erect as many indicators as the Bureau of Street Traffic thinks desirable.



INTERSECTION OF BROADWAY AND FIFTH AVENUE, SHOWING USE OF POSTS AND ROPES



BLOCK SYSTEM AT FIFTH AVENUE AND FORTY-SECOND STREET

## CHAPTER II.

### Regulations for the Management of Vehicles in Locations Specially Congested Owing to the Convergence and Intersection of Streets and to the Original Bad Lay-Out of Curbs and Car Tracks.

Doubtless the men who laid out the streets of New York did what appeared to them, at the time, a very good job. They had no idea, of course, of the tremendous growth of the city and its ever increasing traffic. If they had dreamed of the conditions which now exist they would have run the North and South streets near together, and the East and West streets far apart, or just the reverse of their present arrangement. It seems hard to realize, as we look back, that they did not foresee more clearly, but later on there was still ample opportunity to confine the mistakes to those already made and, as new cross streets were laid out uptown, to space them further apart, and to put in more North and South streets, but those with authority were as blind as those who came before them. At the present time others, equally as shortsighted, have started to widen Fifth Avenue from 40 feet to 55 feet, which takes more from the sidewalks than can well be spared, and makes necessary the cutting off of columns and other ornamental features from many buildings, without obtaining an adequate return for the losses thus entailed. The cost of the work otherwise will also be much greater than if the width of the roadbed were to be made only 47 feet, which is the best width, taking a balance of advantage and disadvantage into consideration. In other words the city is going to pay a large sum for a change which will not be so good when complete as another plan would be which would cost very much less.

The proposed plan of putting part of the traffic in an open cut in Forty-second Street, where it crosses Fifth Avenue, is a very poor one also, and would do more harm than good, besides being a waste of money. I believe a little study of street traffic management will convince any one of its foolishness. The intersection of Fifth Avenue and Forty-second Street is not one of our worst traffic problems by any means. The same plan as shown for Twenty-third Street on the accompanying large diagram is also applicable to Forty-second, Thirty-fourth and Fourteenth Streets, and will cost comparatively little. It consists in simply widening the roadbed to 48 feet, thus increasing the space sufficiently to allow for two lines of vehicles on each side of the car tracks. The sidewalks are now so wide on these streets that four feet from each can easily be spared, except where the stairways to and from the subways are situated, and these should be put inside the abutting buildings, which is not a serious matter, especially when it is often a great advantage to the buildings themselves where there is retail trade to have

these staircases inside, as it increases the number of people who have to pass the booths and shops located within them. This then is the plan which should be adopted at once. In the future, as I have already said (see also article in Part III. entitled, "Street Traffic and Civic Transportation"), the car tracks on the wide cross town streets should be put under ground through the backbone of the city. When this is done it will afford space in the middle of these streets for cab stands located at convenient distances apart.

On November 17, 1906, the writer published the following article in the "Rider and Driver," and afterward in pamphlet form. It was intended to stop the proposed plan of widening Fifth Avenue 10 feet on each side by showing the almost prohibitive expense of such a step and also that more advantage could be derived by a much simpler and less expensive method. This article explains in detail the objections to the plan adopted by the city and the advantages of having it modified before more work is done.

#### The Proposed Widening of Fifth Avenue to Improve Traffic Conditions.

The present agitation in the papers for widening the roadbed of Fifth Avenue, from forty to sixty feet (since reduced to fifty-five feet), makes it worth while to take it up from a different and perhaps more practical point of view than any from which it has been presented heretofore to the public.

The picture here presented appeared in one of the daily papers last June, and gives a good idea of what is proposed.

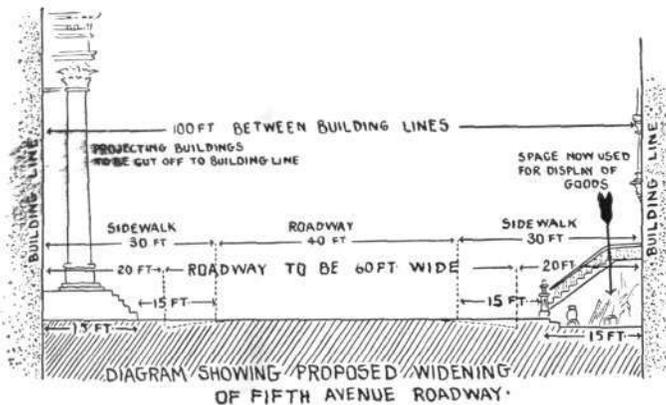
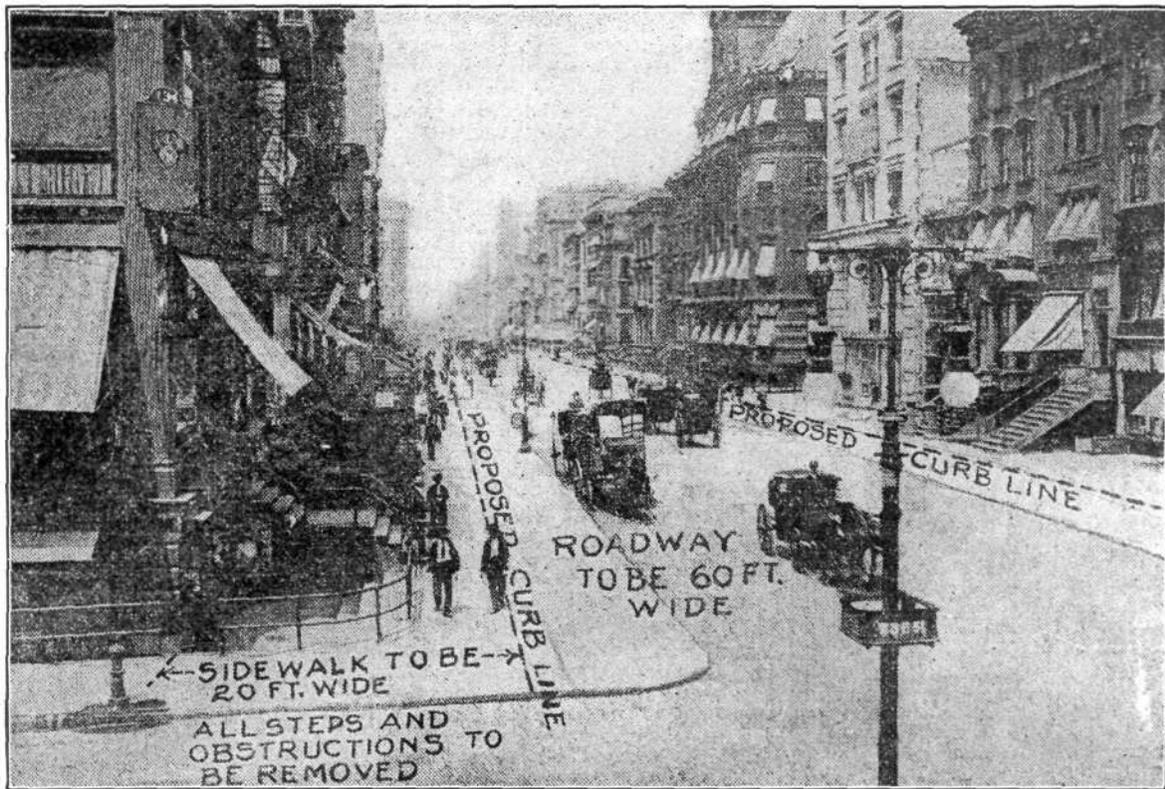
What the legal complications and difficulties will be I do not intend to discuss. It is inconceivable to suppose that any one has erected a building without first getting the lines from the city engineer and having the plans approved by the Building Department. If such precautions have been taken it would seem the City would have to pay all costs of changes, and also be liable for any losses entailed during the time when the changes were going on, due to loss of rent, etc.

The important question is, what is to be gained, and will it be worth the price?

A moving vehicle needs eight feet in width and one standing by the curb seven feet. It is unsafe to allow less. These figures are the result of a close study of street traffic conditions extending over a period of many years.

The present roadbed is forty feet wide, or six feet narrower than is absolutely necessary for six lines of vehicles, and two feet wider than is required for five lines of vehicles. If the roadbed were widened six feet, or three feet on a side, it would answer for six vehicles. Seven feet in all, or three and a half feet on a side, would be better and ample. This would make the total roadbed forty-seven feet. Three feet and a half from each sidewalk could be spared and, if necessary, it would not be a serious or very expensive job to set the steps and railings back three or three and a half feet.

It will be seen that the proposal of making the roadbed sixty feet wide is not a good one, as it falls from two to four feet short of providing for eight lines of vehicles, and is six feet wider than necessary for seven lines. Besides this, to regulate traffic simply and easily on such a street as Fifth Avenue, there is very little to be gained by having space for an odd number of lines of vehicles. There should be space for either six or eight. I believe six is enough. The crossing for pedestrians of eight lines of vehicles is a serious matter, and there are other reasons why six lines are better.



The expense of making the roadbed sixty-two feet wide and cutting back the buildings would be enormous, while that of making it forty-seven feet would be comparatively small and very easy to do, and, from a traffic standpoint, on the whole, would be better, even if the expense were the same.

The trouble of nearly all such schemes is that they are gotten up by people who have not given sufficient study to the questions to have a practical knowledge of the necessities. They jump at conclusions without thought or consideration of the harm which would be done if their plans were carried through. The traffic problems in New York are continually getting more serious and more important, and will need the best thought and a great deal of money to solve properly. By all means widen the roadbed of Fifth Avenue to forty-seven or forty-eight feet, but more would be criminal stupidity.

Again on May 26, 1907, the writer published the following in a pamphlet entitled, "How to Improve City Car Service."

**Changes in Curb Lines and Locations of Car Tracks. Widening of Roadbeds of Streets to Increase Average Speed and Number of Cars Possible to Run Within a Given Time.**

Broadway, Fourteenth, Twenty-third, Thirty-fourth and Forty-second Streets now have 40-foot roadbeds. This does not leave enough room on each side of the tracks for two lines of vehicles. If the roadbeds were increased 4 feet on each side, making them 48 feet in all, it would give room for two lines of vehicles and very much relieve that part of the street occupied by car tracks. It is clear that if this is done the average speed of cars, as well as that of other vehicles, can be increased and more cars be run within a given time, which means more seating capacity. Broadway is too narrow already, both as regards its roadbed and its sidewalks. The writer would, therefore, advise no change in it as far up as Fourteenth Street. It even

might be well to narrow the roadbed somewhat and add to the sidewalks, because the present 40-foot roadbed allows of but one line of vehicles on each side of the car tracks, and a 34-foot roadbed would do that nearly as well as the present 40-foot one. The 3 feet added to each sidewalk would be a great benefit to pedestrians. The vehicular traffic from the Battery to Fourteenth Street on Broadway is not extremely crowded, while the sidewalks are. From Seventeenth Street to Thirty-third Street, however, the writer advises that the Broadway roadbed be widened to 47 feet, also that the roadbeds of Fourteenth, Twenty-third, Thirty-fourth and Forty-second Streets be widened to 48 feet. The sidewalks on these streets being plenty wide, the 4 feet taken

PERMANENT PLAN  
FOR  
FACILITATING STREET TRAFFIC  
BY CHANGES IN CAR TRACKS AND CURB LINES  
AT THE INTERSECTION OF  
BROADWAY & FIFTH AVENUE.  
PREPARED BY W. D. ENO, 1907.



Continuous lines show completed plan.  
Dotted lines show discontinued locations of curbs and car tracks.

Car tracks on Broadway are slightly shifted East from 21<sup>st</sup> to 25<sup>th</sup> street; and from Broadway to E 23<sup>rd</sup> street, the curve is changed to allow two lines of vehicles between them and the curb.

Curbs on Broadway from 17<sup>th</sup> to 21<sup>st</sup> street, 25<sup>th</sup> to 43<sup>rd</sup> street, and on Fifth Avenue from Washington Sq. to 23<sup>rd</sup> street, and from 25<sup>th</sup> to 60<sup>th</sup> street are moved back 3-6", and those on 23<sup>rd</sup> street 4".

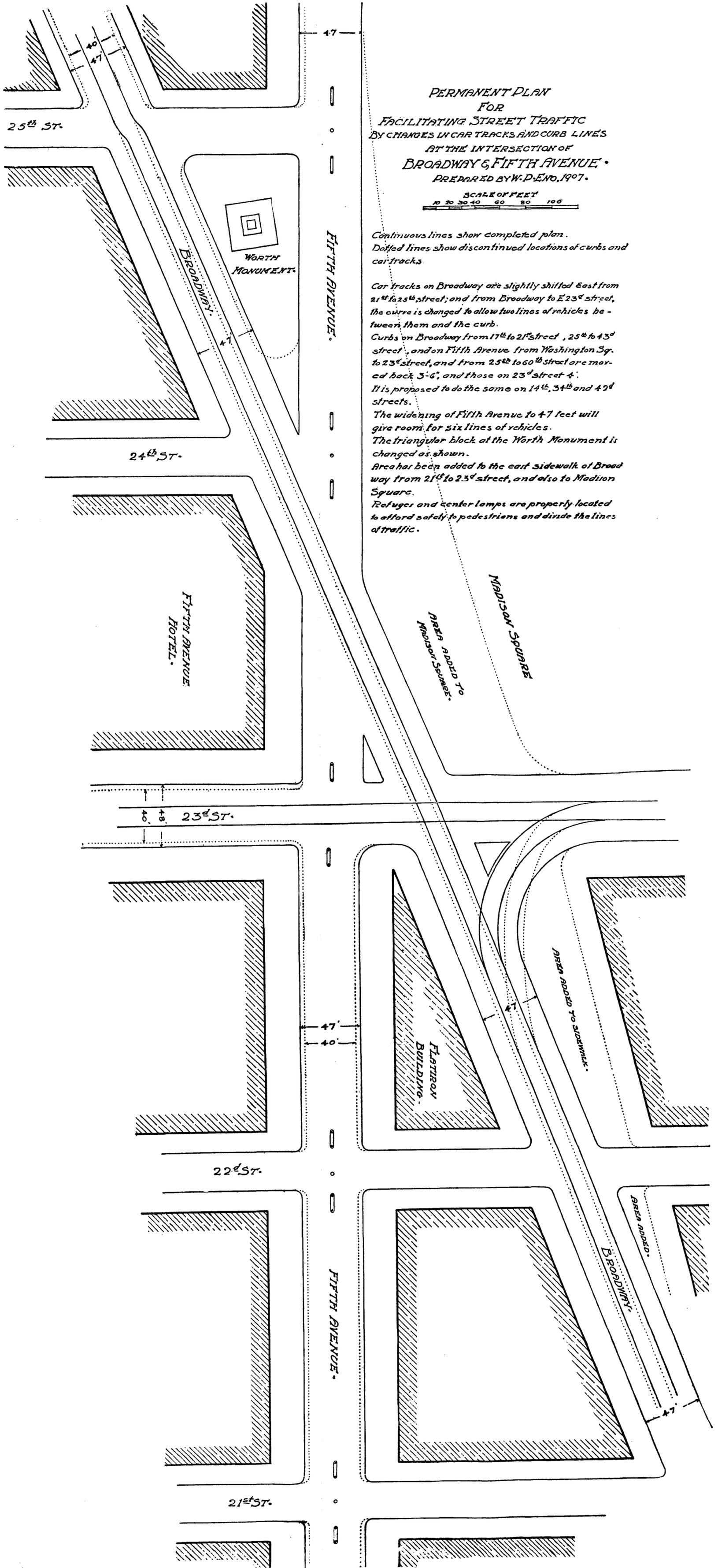
It is proposed to do the same on 14<sup>th</sup>, 34<sup>th</sup> and 42<sup>nd</sup> streets.

The widening of Fifth Avenue to 47 feet will give room for six lines of vehicles.

The triangular block at the Worth Monument is changed as shown.

Area has been added to the east sidewalk of Broadway from 21<sup>st</sup> to 23<sup>rd</sup> street, and also to Madison Square.

Refuges and center lamps are properly located to afford safety to pedestrians and divide the lines of traffic.



from each of them will not be seriously missed. He also advises that the Fifth Avenue roadbed be increased at the same time from 40 feet to 47 feet. This will provide room for six lines of vehicles and there is now only room for five lines. The plan which has been talked of so much of widening the Fifth Avenue roadbed to 60 feet now reduced to 55 feet is not only undesirable on account of the enormous expense and interference with existing buildings, but it would leave room for only seven lines of vehicles, which is no better than six lines, and from a street traffic management point of view not so good. It is true that there are no car tracks on Fifth Avenue, and therefore, in this discussion, its widening would have no place were it not for the fact that every avenue or street running north and south that can be increased in street traffic capacity will relieve the arteries upon which there are car tracks.

From Twenty-first Street to Twenty-fifth Street, on Broadway, the car tracks should be shifted slightly to the east, so as to allow room for two lines of vehicles between them and the west curb. The curve of the tracks from Broadway to East Twenty-third Street should also be changed to clear the southeast corner of Broadway and Twenty-third Street, by enough to allow two lines of vehicles between them and the curb. (At this location, taking in the intersection of Broadway and Fifth Avenue,

and extending from Twenty-first Street to Twenty-fifth Street, there are other curb lines that need changing. These are shown on a diagram following this chapter.)

In future no new single car tracks should be allowed to be laid in any street where the roadbed is less than 38 feet wide, and no double tracks where it is less than 48 feet, for otherwise there would not be room for two lines of vehicles on each side of the car tracks. Where the tracks are already down, there are some streets with two lines of tracks which could be improved by moving one of the lines to another nearby and parallel street and others where the sidewalk might be narrowed to increase the width of the roadbed.

The writer is strongly of the opinion that the true solution of crosstown car traffic is to put the lines underground, at least through the middle or backbone of the city. Interference with north and south traffic would be eliminated and the streets left free for other traffic, more speed made possible, and danger reduced. This also happens to be the only satisfactory solution of the cab stand problem, as by it the broad cross streets could be used for cab stands in the centers of them, and these streets are at convenient distances apart for this purpose and afford ample space for all cabs necessary. (See article in Part III. entitled "Street Traffic and Civic Transportation.")

**See Preceding Diagram for Details of Plan at the Intersection of Broadway, Fifth Avenue and Twenty-third Street to Improve Street Traffic Conditions by the Means of Changes in Curb Lines and Car Tracks.**

#### THE REGULATION ARTICLE.



"Light Vehicles Near the Curb."

The preceding diagram has shown how traffic conditions at a specially congested place can be improved by a permanent plan. Of course, when it is known just what is the best plan, it should be adopted and the necessary changes in locations of car tracks and curb lines be made without delay. Sometimes it is not possible, however, to decide right away just what changes would be best, and then iron posts with ropes strung between them should be resorted to. The posts should, however, be painted white and be spiked down and be kept in position during the night, as well as in the day time, and some of them should have lamps. The ropes should be of white cotton  $1\frac{1}{4}$  inches in diameter instead of the clothes line now used. We should, however, not be satisfied with this kind of a makeshift any longer than is necessary to enable us to decide what is the best plan to be permanently adopted. I have chosen for the purpose of demonstration, both in the preceding diagram, showing the permanent plan, and in the following one, showing the temporary plan, the intersection of Broadway and Fifth Avenue. Most of the other congested intersections also are susceptible of great improvement, first through better thought-out methods by means of posts and ropes and afterward by permanent changes in car tracks and curbs after the right scheme has been found by experiment. In arriving at the plan, which I give in the following diagram, I began by trying to improve upon the plan which was put in practice in 1904. This plan was at first about as impracticable as any that could be devised, and was gotten up with a lamentable lack of knowledge of the requirements. (Note.) The worst features of this plan have gradually been eliminated till it now answers the purpose, but in a very clumsy way. I made quite a number of diagrams, some of which I published, and one of which I consider much better than that now in use. After making these plans for ropes and posts I finally shifted over and made a permanent plan by

slight changes in car tracks and curb lines, see the diagram which I have already given. This, of course, was much better than any temporary scheme could be made with posts and ropes. I then tried to see how near to this I could come, with the car tracks and curbs unchanged, by the method of posts and ropes. This plan was a great deal better and simpler than the other temporary plans I had made, and led me to discard all of them. It is better, not only in regard to this location as judged separately from any other question, but because it is always a mistake to have special rules or regulations for any special place if it can possibly be avoided. The best plan for a special place is one which can be understood and followed by the drivers from their knowledge of the regular rules and regulations as published and distributed for their guidance. The intersection of Broadway and Fifth Avenue is not at right angles, and, therefore, the space left open alternately by the block system must necessarily be somewhat longer than at, say, Fifth Avenue and Forty-second Street, but I do not consider this a serious factor, nor do I think that the fact that the block system would have to be worked at Twenty-third Street also would seriously hamper matters. There is room for three cars on the uptown track between Twenty-third Street and the line at which they would have to stop when Fifth Avenue traffic was crossing Broadway. If these were run on thirty seconds headway, which is extreme, there would still be quite a leeway of time. All the other matters connected with this plan appear to be simple and to present no unusual features, and to require no special regulations in regard to deviating from the most direct route. In starting any change care should always be taken to fully instruct the officers in charge as to what is desired to be effected, and to have plenty of them on duty there for the first few days, or until the public becomes thoroughly familiar with the working of the plan.

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NOTE.—By this plan Twenty-fourth Street was cut off just below the Worth Monument. To show how ridiculous the working of this scheme was I give the following example:

If you started from the Albemarle Hotel and wanted to drive to the Broadway door of the Hoffman House, which is the next building to it, you were obliged to turn down Broadway to Fifth Avenue, down Fifth Avenue to Twenty-second Street, through Twenty-second Street to Broadway, up Broadway to Fifth Avenue,

up Fifth Avenue to Twenty-fifth Street, through Twenty-fifth Street to Broadway and down Broadway to the Hoffman House, and then you were permitted to stop at the Hoffman House. This meant going over one-third of a mile further than was necessary and all to get to the building next door. At other places in the city the arrangements were about as foolish. Is it any wonder that people found fault and that the magistrates backed them up and did what they could to enjoin the Police Commissioner from making himself a nuisance.

TEMPORARY PLAN  
FOR FACILITATING  
STREET TRAFFIC  
AT THE INTERSECTION OF  
BROADWAY & FIFTH AVE.  
PREPARED BY  
W. P. ENO, 1907.

SCALE OF FEET.  
10 20 40 60 80 100

The standards now used are red; they should be white, and the corner ones should be carried up higher. To the top part could be attached any signs for direction of traffic, names of streets, etc.

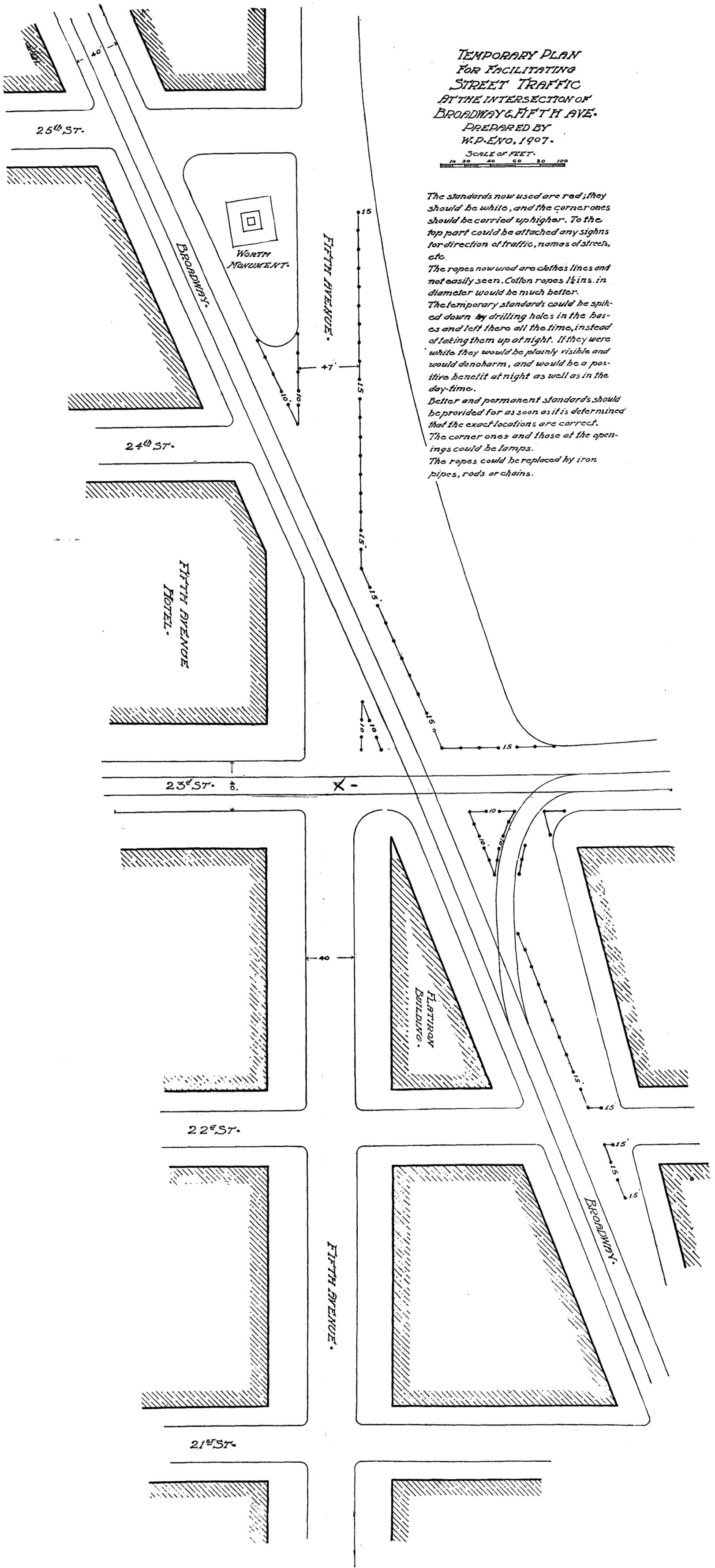
The ropes now used are clothes lines and not easily seen. Cotton ropes  $1\frac{1}{2}$  ins. in diameter would be much better.

The temporary standards could be spiked down by drilling holes in the bases and left there all the time, instead of taking them up at night. If they were white they would be plainly visible and would do no harm, and would be a positive benefit at night as well as in the day-time.

Better and permanent standards should be provided for as soon as it is determined that the exact locations are correct.

The corner ones and those at the openings could be lamps.

The ropes could be replaced by iron pipes, rods or chains.



I have shown by the preceding diagrams how the management of street traffic, where three streets come together, can be simplified both by a permanent and by a temporary method. Similar plans can be made by similar reasoning for other places where similar conditions exist. In New York the intersection of Broadway, which runs in a diagonal direction to the other streets, furnishes several of these problems, but for the purpose of this book one example is sufficient to illustrate how they can be solved.

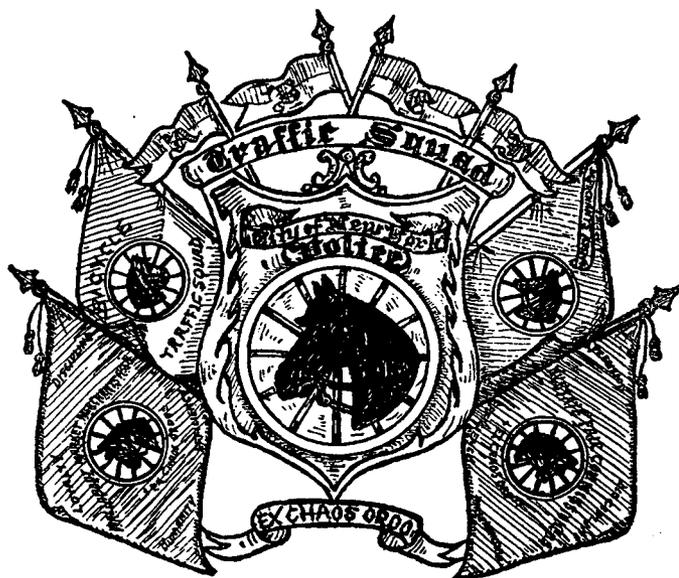
There is one other class of problem which I shall here treat briefly. It exists through that very common error of those who years ago laid out cities, and consists of the circle at the intersection of one or more streets. This is exemplified by Columbus Circle in New York, by the Place de l'Etoile in Paris and by Dupont Circle in Washington, besides numerous other instances all over the world. This scheme was adopted to give a generally pleasing effect, and to shorten distances between important points of a city, and where traffic is not great it does no serious harm, but where traffic is crowded as it is in our larger cities, it constitutes a tremendous disadvantage, as all the traffic of each street is obliged to go into one roadway where it passes around the circle. The effect is that of a funnel. The first principle to be adopted to remedy it is to make all traffic go in one direction; that is, to keep to the right from the point of entering the circle to the point of leaving it, or in the reverse direction to the hands of a watch. In Paris, at the Place de l'Etoile, notably, if this principle were observed it would greatly simplify matters. The next move is to restrict the roadway around the circle to a width which will not accommodate more lines of vehicles than can be safely

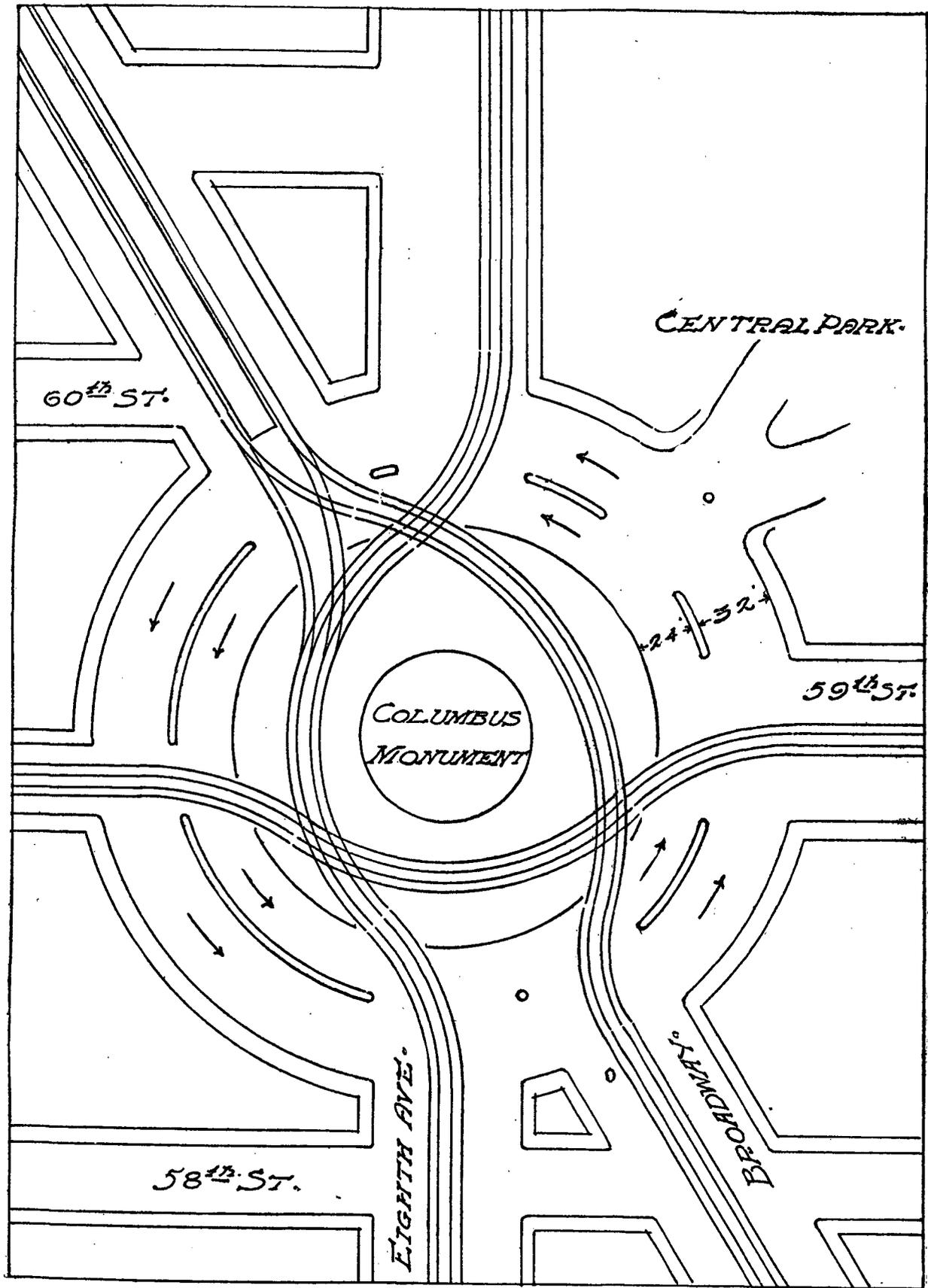
crossed by pedestrians. Where vehicles are moving in both directions without isles of safety six lines, three in each direction, is the limit, but with isles of safety this can be increased to eight lines, or four in each direction. Where the lines are moving in but one direction as around a circle we must restrict the space to four lines, for which 32 feet is about the proper space. If we make it more than that five lines will creep in with accompanying danger. In the so-called Permanent Plan (see page 28) there can be a second roadway, 24 feet wide, nearer the center of the circle, which will give space for three more lines of vehicles, or seven lines in all, but this second roadway must be divided from the first by frequent isles of safety, or a continuous curbed walk between the converging streets.

In the so called Temporary Plan (see page 29) the roadway is restricted by means of posts and ropes. The posts should be painted white and spiked down, and some of them should have lamps. The ropes should be of white cotton  $1\frac{1}{4}$  inches in diameter. (See Note.) This so called Temporary Plan should, however, not be regarded as satisfactory any longer than is necessary to decide upon a permanent plan. In the permanent plan great advantages can be gained by slight changes in car tracks, so as to get all their intersections closer to the center of the circle and having them cross the roadway as nearly as possible in a straight line, for when they cross on a curve the ends of the cars swing over an arc of the roadway, thus restricting it and making it dangerous. In the future it is to be hoped that all cross town tracks will be put under ground at least through the center or back bone of the city, and this will eliminate the Fifty-ninth Street tracks from this problem.

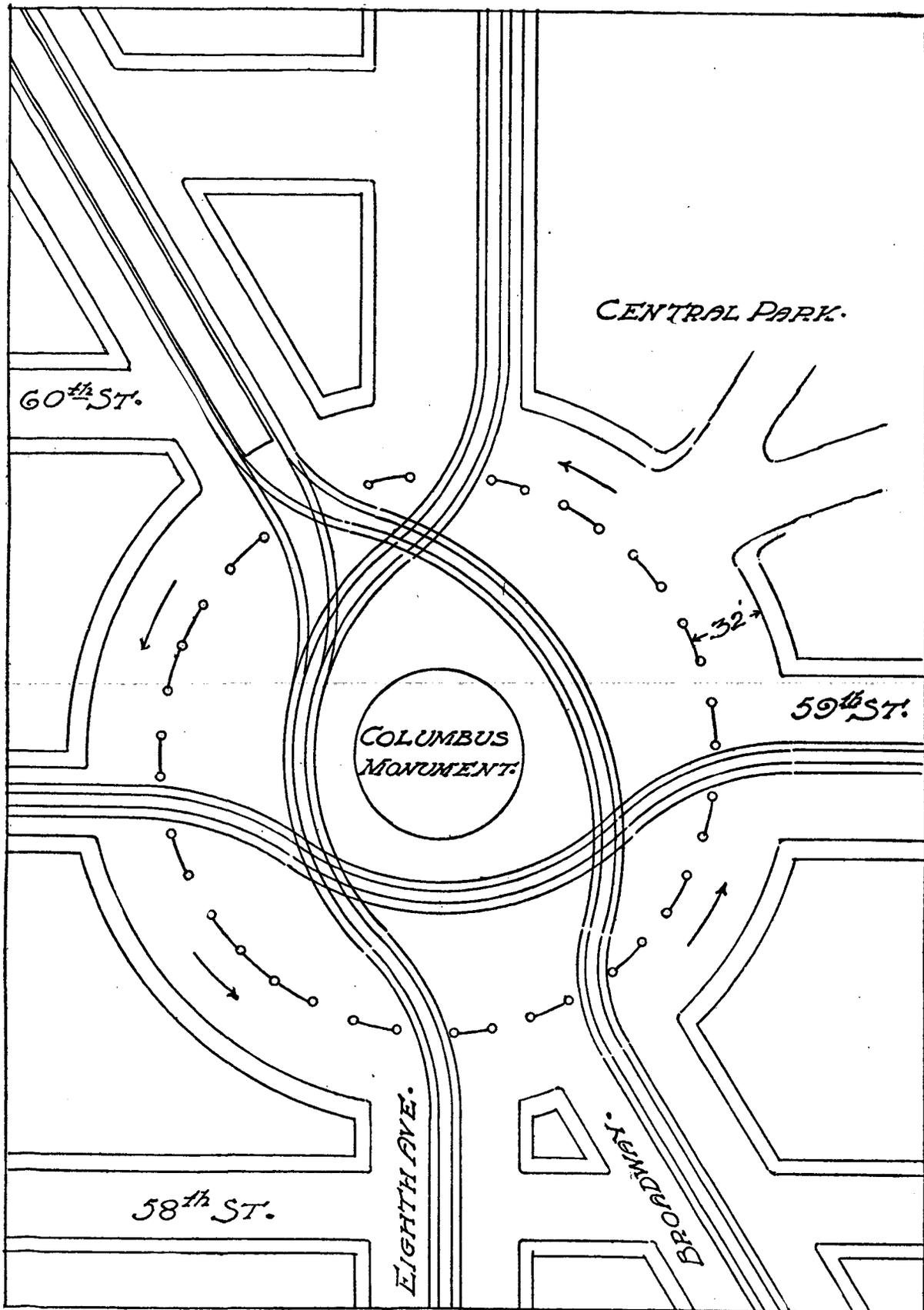
NOTE.—In 1904 posts and ropes were put in use, but notwithstanding all I have been able to do I have not succeeded in getting the Police Department to use or place them properly, though the plan has been shorn of its most annoying features. As an example of how foolish it was in the beginning and remained for over a year, I give the following example: If a vehicle came out of

Central Park and wanted to go east on Fifty-ninth Street it had to turn and go west, around the Circle to Eighth Avenue, down Eighth Avenue to Fifty-eighth Street, through Fifty-eighth Street to Broadway, up Broadway to Fifty-ninth Street, and then it could go east on Fifty-ninth Street. Is it a wonder that the public objected to such unreasonable and ignorant demands?





*PERMANENT PLAN FOR HANDLING TRAFFIC AT COLUMBUS CIRCLE BY MEANS OF CHANGES IN CURB LINES.*



*TEMPORARY PLAN FOR HANDLING TRAFFIC AT COLUMBUS CIRCLE BY MEANS OF POSTS AND ROPES.*

Working out the preceding plans to correct the mistakes made by those who laid out the streets in the first place has suggested trying to see if in planning new cities or new parts of old cities it would not be possible to avoid these errors. The worst two are presented by the preceding diagrams and consist of places where more than two streets intersect and where a number of streets converge to a circle. The following diagram shows a unit, by the dotted lines, of one mile square. The units would be duplicated to cover whatever territory was to be included. There are twelve blocks to the mile. It would be better to have the regular streets run N. E. & S. W. and N. W. & S. E., and the diagonals, which are at an angle of 45 degrees with them, run N. & S. and E. & W., because then the buildings which are on the streets running East & West would be the only ones which do not have sunlight in each end. L'Enfant made a mistake in laying out half the streets in Washington East & West, as is particularly noticeable in Winter, when the snow on the South side of these streets lies unmelted for days and sometimes weeks.

The wide streets or avenues shown in the diagram are 125 feet wide, the sidewalks each being 20 feet, and the roadways each 30 feet, leaving 25 feet in the middle for street cars, walks and bridle paths, as may be required. On the diagram are shown on different grades how, as transportation facilities are required, they can be adopted and increased. Of course, two or even all of these grades can be utilized on the same street and on the lower grade four tracks could be used.

The narrower streets are 70 feet wide, each sidewalk being 15 feet wide and the roadway 40 feet, which gives room for four lines of vehicles and space for cab stands and waiting vehicles in the middle. Of course,

the building lines can be moved back further, so as to allow for parking, as in Washington, and wider sidewalks, but this would be desirable in some streets and not in others, and is not indicated in this diagram. The street widths are, however, designated by a definite number of feet, which experience in traffic management has shown to be proper. Such of the wide streets as transportation facilities require could be used for surface cars, and it is interesting to find that if they are all so used the greatest distance necessary to walk from any house to the nearest car line is one block and a half, and that the greatest number of transfers necessary to come within one block and a half of any other house is two. Of course, all of the wide streets would not be used for cars, and it would be well to restrict cars to as few streets as possible, and in large cities using perhaps two or three grades on the same street for transportation, thus keeping the open spaces in the middle of the other streets free for walks, bridle paths, and perhaps some for bicycles, which would be largely employed if there were free ways restricted for their use.

The dotted spaces on the diagram are for parks, playgrounds, public buildings, hospitals, opera houses, theatres, schools, churches, etc. It will be seen that the open spaces would be evenly distributed throughout the city, and that these could be easily joined by parkways where desirable.

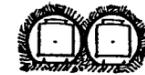
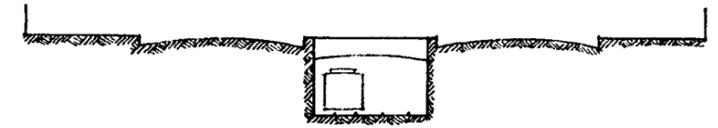
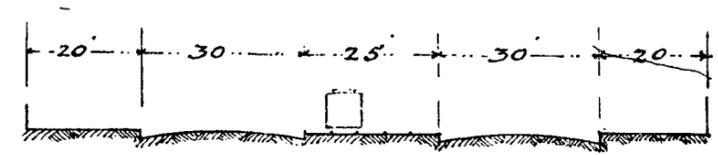
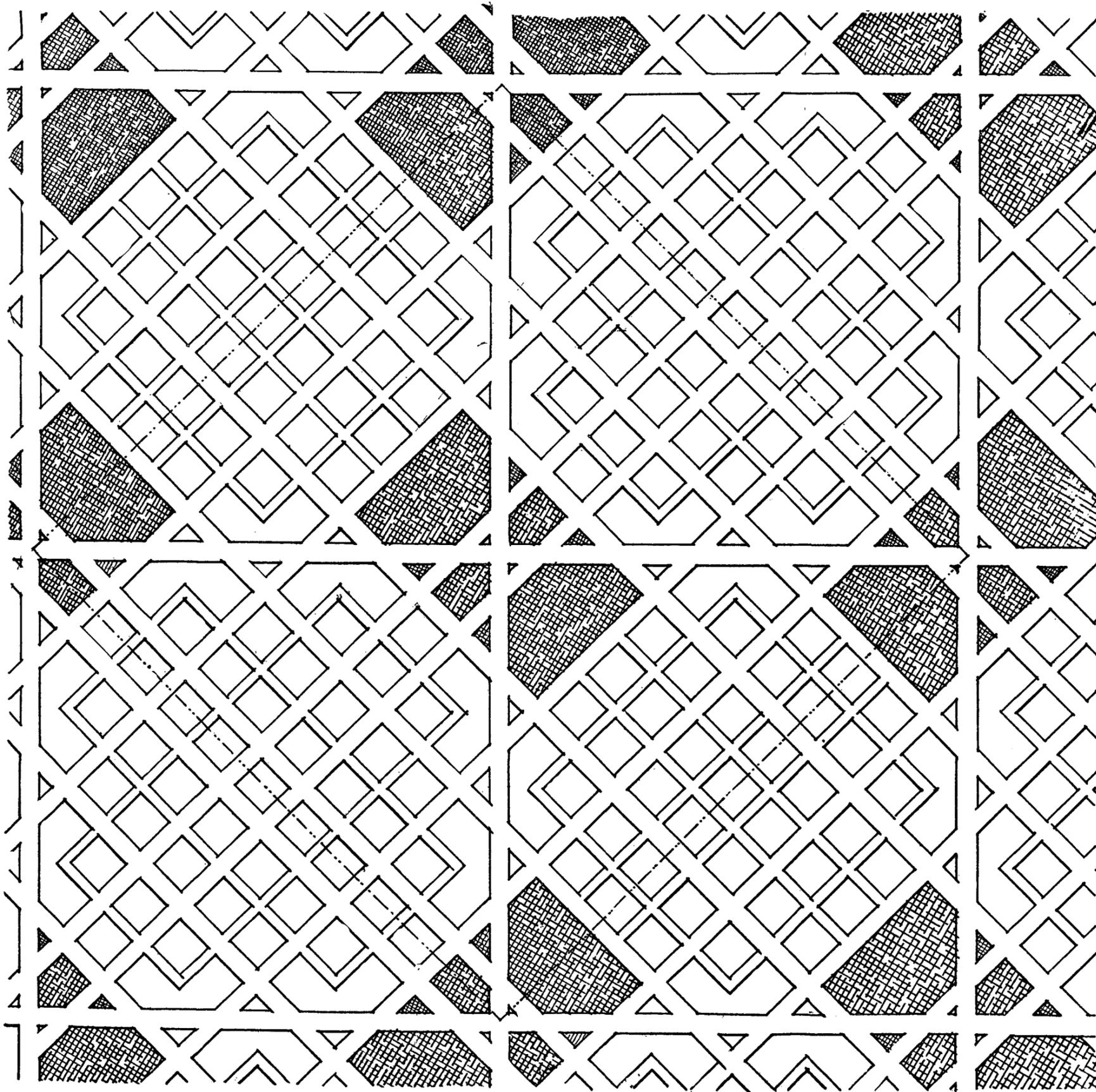
It will be understood that this diagram is intended to be suggestive only. All the details are not worked out, but it seems to have great possibilities, and it certainly does away with two of the great difficulties we are wrestling with in New York, that of the intersections of more than two streets at the same point, and that of the circle. There may be other ways to solve this problem, but so far I have been unable to find them.

#### END OF PART II.

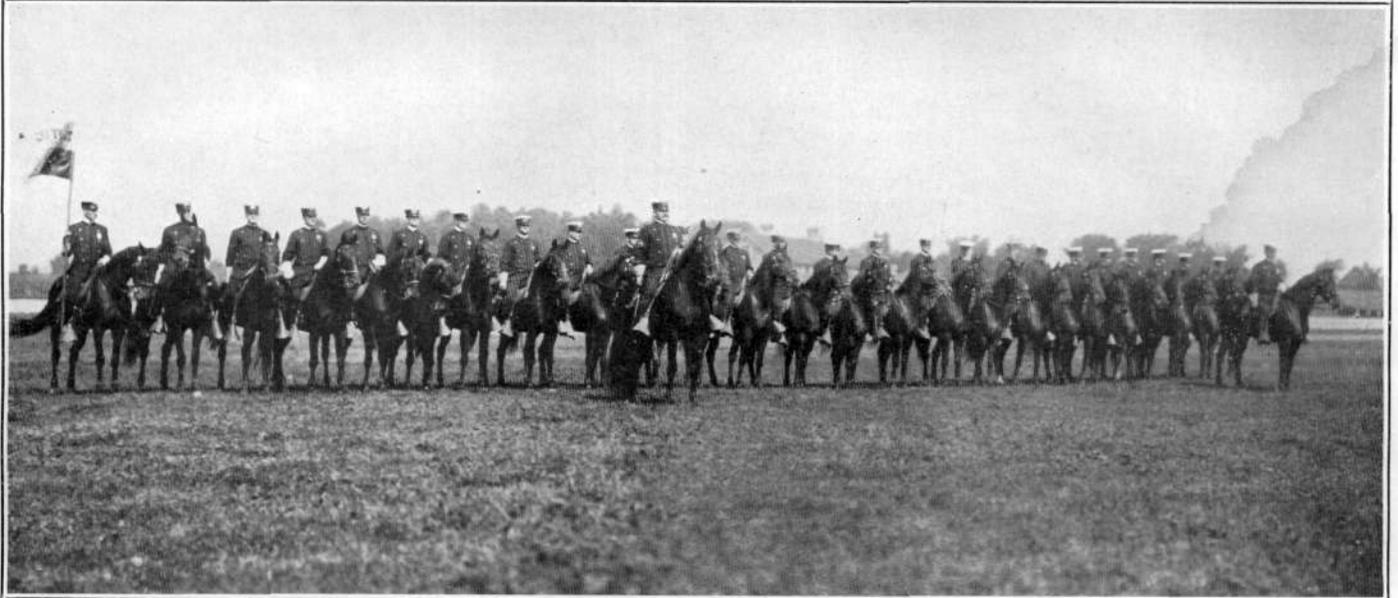


From *Puck*, Copyright, 1909. By permission.

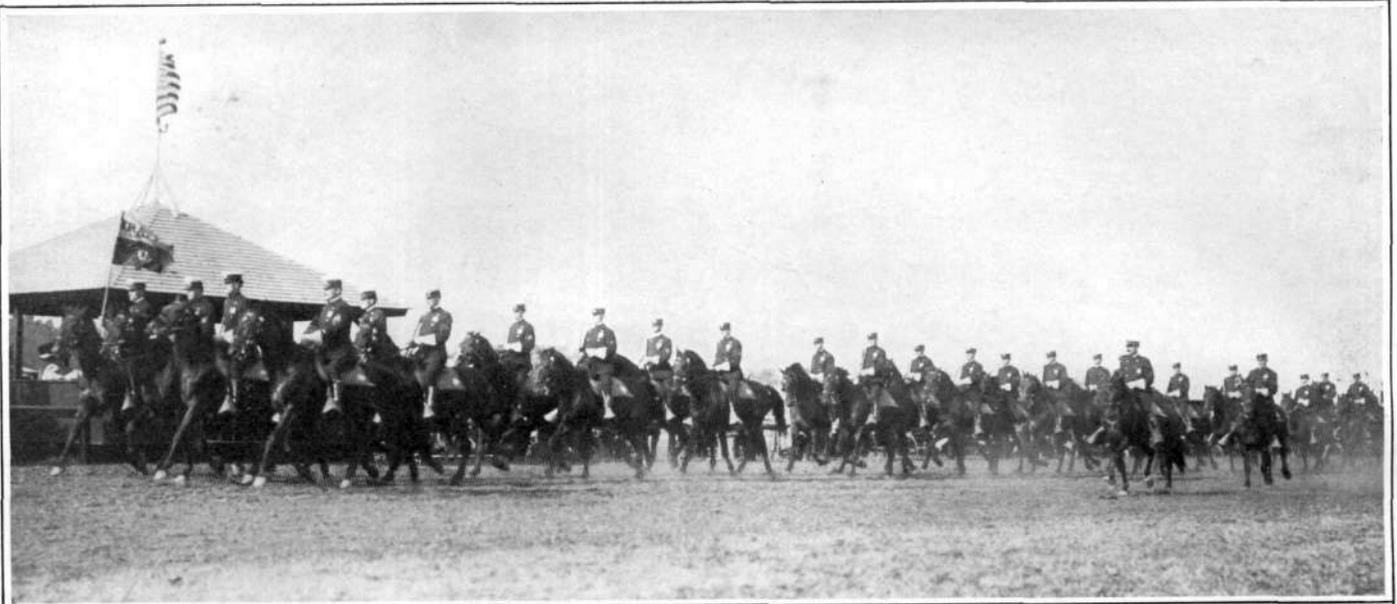
IF CENTAURS WERE ON EARTH.



*The above diagrams show surface, sunken and under-ground car lines. The under-ground system can have four tracks. One, two or three of these systems can, of course, be installed on the same street. For details see text.*



EVOLUTIONS AT HORSE SHOW, STATE FAIR, SYRACUSE, SEPTEMBER, 1908



HOLLOW SQUARE, STOPPING RUNAWAY AND ESCORT DUTY, AT SYRACUSE

# PART III.

**Articles on Automobile Licenses, Numbers, Speed, Signs, etc., and on Street Traffic and General Police Work. Many of these were published by the author some years ago, but are believed to be still pertinent.**

## CHAPTER I.

### On Automobiles.

I favor federal license for the drivers of all motor vehicles, including motor cycles. A state license may or may not be recognized in other states and leads to complication and unnecessary trouble. License should be granted only on certificate of good character and rigid examination as to ability to drive safely the kind or kinds of vehicles for which the license is desired. The license should be in the form of a small pocket-book containing the photograph and description of the driver, and his place of residence. If his place of residence is changed, note of it should be made in the book. If the driver is professional the book should state name and address of employer and any changes of the same.

Records of arrests and complaints, giving time, place and reason, should be entered on the license by the court or by the police.

I favor only one number and that much larger than at present, to be placed in front and rear of each machine. In order to reduce the number of figures there should be a letter prefix denoting series, then should come the number and after that the letters designating the State or Territory where the owner lives. Thus, Series B, No. 7420, State of N. Y.

**B 7420 N. Y.**

There are some letters that are not very easy to distinguish from each other, and these should be eliminated, but there would be at least twenty left that are appropriate for the purpose. With the use of the twenty letters to denote series we could get with a maximum of four figures  $9999 \times 20 = 199,980$  designations for that

number of cars. This would certainly be enough for any one State, especially as when a machine is sold it should have a new number and the old one be turned in. There should be an annual charge for the use of a number which would insure the old numbers being handed in when a car went out of use. Each State or Territory would, of course, have its own numbers, but it is to be understood that the number of the State or Territory where the car belongs should be good anywhere. It might be possible to have the purchase of the number and the annual fee for it adjusted to cover the total tax on the car. The present general method of having numbers for each State where the car is used is full of annoyance and bother, and the numbers are so small that it is difficult to read them, and there are often too many figures.

I favor federal speed regulations, but reserving the right to Towns, Cities and States to further limit speed as well as the use of certain highways by motor vehicles by means of signs.

I favor a law making it a penal offence for a dealer to give or for a servant to receive any gratuity, commission or discount. If there is to be any such rebate it should go to the person who pays the bills. The present custom of commissions is due to the desire of dealers to obtain business, and is making thieves of a large percentage of the chauffeurs, for once educated to steal small things, their self respect is broken and it is only a short step to highway robbery. Often more things are bought than are required simply to obtain the commission, and not infrequently these things are sold again by the chauffeur and the man who pays for them in the first instance never sees or uses them.

This is, of course, not confined to chauffeurs, but unfortunately extends to almost every branch of service. There is nothing that needs more prompt and radical attention. It is striking a serious blow at the

character of thousands who would otherwise have retained their self respect and remained honest citizens.

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**The three following articles treat more at length of Licenses, numbers and speed and of road signs:**

**National License for Motor Drivers and National Numbering for Motor Cars.**

Published Nov. 16, 1907.

The automobile, being a comparatively new institution, has not settled down into its proper and permanent position in our every-day life.

In 1905 the Automobile Club of America published a book on the automobile laws of the different States, containing over 200 pages, which is an example of frenzied and misdirected effort to cope with something that was not understood.

What is needed is a few just laws, simple and easily learned, which should be valid everywhere.

These laws should be denuded of everything superfluous; they should be as lenient as is consistent with the personal and property rights of all; they should protect the drivers of automobiles, their passengers and the general public from unnecessary danger.

A national bureau of examination for drivers and the registration of machines should be created, just as there is for steam craft, but modeled on better lines. The fees for examination and the issuing of licenses and registration should be sufficient to pay all expenses of the same and leave a substantial surplus. The surplus should be applied to road maintenance, as automobiles injure the roads excessively and increase the cost of maintenance, and at the same time good roads more than anything else make the use of the automobile desirable.

A National Board would afford the most simple and logical means for managing this comparatively new subject. License should be granted on application and after satisfactory examination in regard to the applicant's ability to drive the kind of machine for which the examination is made. The license should then hold good everywhere. In cities, however, the drivers of public vehicles should also have a city license, coming under the city regulations, but in no case should a city public vehicle license be granted without the national license as a preliminary.

The National Board should maintain branches at convenient locations in all the States. A person applying for a license should give particulars as to the kind or kinds of machines for which he wishes to qualify. If the applicant fail to pass he should be obliged to pay a percentage of the cost of the license, in return for the time of the examiners. This would make him careful, should he come up again, to be properly prepared.

The driver should be examined rigidly as to his thorough knowledge of the rules of the road and the traffic regulations and speed limits. He should prove

his ability to control safely and skilfully all the driving mechanism of his car and also have a practical knowledge of each component part of its machinery.

The license should be in the form of a small pocket-book. It should contain a photograph of the person to whom it is issued, with a minutely detailed personal description, his place of residence and any other particulars useful for identification. Whenever the arrest of a driver is made, if bodily injury to any one has been caused, he should be brought before a magistrate forthwith, if practicable, though at times it may be better judgment to summon him to report at an appointed time, provided preliminary investigation shows that there is likely to be no attempt to escape.

If no bodily harm has been done it will usually be sufficient to take the number of the driver's license and his address and appoint a place and time for appearance, though he should be allowed to demand immediate hearing if he prefers.

If, when the accused appears before the magistrate, he succeeds in clearing himself, he should be discharged immediately; but if he is shown to be guilty he should be reprimanded in the case of a first offence or of sufficient extenuating circumstances. If, on the contrary, it is shown to be deliberate disobedience of the law, the offender should be punished by suspension of his license. For every offense for which a driver is arrested an inefaceable entry should be made in his license book, so that in each case the magistrate, before whom the driver comes, shall be able to immediately become familiar with his past record and act accordingly. If a driver continually breaks the law his license should be revoked, as contrary to the public welfare.

The costs of the prosecution should be paid out of a fine imposed on the culprit. This fine should not be exorbitant, but should be large enough to cover the costs of those cases, also, which are not proven, and in which the driver is allowed to go free. In my opinion, it would be well to make the fines large enough to pay to every driver falsely arrested a certain amount as a partial compensation for the trouble to which he has been put.

This method of license by examination affords a complete check on the examiners, as the record of each driver should be tabulated at the main office and show who was the examiner who conducted the examination and granted the license. It is only right that those who wish to drive automobiles, either for pleasure or profit, should submit to these reasonable regulations, for while they are more or less of a hardship to many of us who would fit ourselves to drive skilfully and who have regard for the law of the land and for the comfort and right and pleasure of others, unfortunately a larger proportion of those who drive motor cars than would seem possible appear to lack all regard for everything except their own selfish pleasure.

This plan would make the driving of any automobile dependent on a federal government license, and of public

city vehicles upon a city license in addition. Fines and threatened imprisonment don't seem to have been successful. It is my opinion that they never can be. The purchasing of licenses to run automobiles at a price sufficient to cover the expense of a federal board of examiners enables the authorities to take away the fun from the amateur and the means of livelihood from the professional, in the event of his transgressing the law.

This plan would put a stop to most of the automobile traps which are often laid by country officials anxious to add to the local treasury. These traps are usually laid on some level road where there are no cross roads or other dangers and where considerable speed can be indulged in safely, and should be allowed up to reasonable limits, provided it does not annoy other users of the highway, or the people who live along it, by making too much dust.

The question of dust has assumed serious proportions and must be reckoned with. The broad tires and low construction of automobiles are not only making it very expensive to maintain the roads, as the surface is being carried off (and this is why I think the license and registration fee should be high enough to pay for that damage, as well for the expenses of issuing the license), but are in many cases injuring property along the roads, so that it cannot be rented or sold, and are making the use of the roads to the great majority of our people—those who have no automobiles—so disagreeable and uncomfortable, that the automobile must be controlled within reasonable limits. Automobiles should not be allowed to travel on any highway (unless it is dust-proofed, either by water or oil, or coal tar, or some other preparation) at a rate of speed greater than can be indulged in without seriously incommoding others.

The present necessity for having a local number should be superseded by a national number, good everywhere. There should be one in the front and one in the rear. Those in the front and rear should be larger than at present and the rear number also should be lighted, so as to show clearly at night, and be located high enough up to be easily seen and clear of all parts of the vehicle or luggage. The letters and figures on the number placard should be so devised as to clearly show the State or Territory in which the number has been obtained. The price charged for the annual use of the number should be the only tax on the machine, and when it changes hands a new number should be obtained. The yearly charge for number should be in proportion to the weight of the machine, plus the weight of the load it is intended to carry.

The way to start this simplification of existing conditions is for the United States Government to put it in operation in the District of Columbia, and make it unlawful for any automobile which has not a national number to be driven within the District, or for any one who has not a national license to drive within the District.

It is a question whether or not these restrictions can

be extended to all the old post roads, which were formerly used and are still used for interstate commerce. If they can, then there is no doubt but that the whole matter is within the power of the National Government to regulate, for if automobiles are barred from a few of the important roads in a State without national license to drive and national number of registration they would have to obtain them. The several States and Territories will soon see the lack of necessity for local laws if the national ones are sufficient and in force. Such local regulations as to speed, where a modification seems desirable, or the use of certain kinds of vehicles on certain roads seems dangerous, should be left to local authorities, to be made by means of signs of limitation, and they should be lighted at night.

To facilitate those who are striving to fit themselves to obtain a license they should be allowed to take lessons from a licensed driver, provided he is sitting beside them; but the licensed driver should be held responsible at such times as though he were driving himself, and lessons should not be given in a city during the crowded hours of the day.

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### **National Speed Regulations Proposed for Motor-Vehicles, Bicycles and Horses.**

Published Oct. 5, 1907.

The legalized speed rate for motor-vehicles is ridiculous and impractical. There is a middle line between the speed that should be permitted and that which should be forbidden. If we make the speed rate unreasonably low it will usually be exceeded and every motorist made a law breaker, as he is now. We should therefore place the limit at a point where it can reasonably be obeyed and then enforce compliance. That a motor-vehicle can safely go at a greater speed rate than a horse or bicycle is also a matter that should be taken into consideration.

*I believe that these rules should be national and not local, as is desirable for all rules relating to the use of highways, but that towns, cities and states should have the right to further limit the use of their highways as to speed and other regulations and the kind of vehicles to be used on them by putting up clearly discernible signs with warnings and directions and that these signs should be lighted at night.* There are many roads, which, on account of their narrowness, steepness, sharp turns or the fact that there is a steep bank on one or both sides, a precipice or something else, are absolutely unfit for motor-vehicles to use, as they cause extreme and unnecessary danger to those using horses. Most of these roads were made before motor-vehicles were in use and are still fit for what they were intended but not for motor-vehicles. The signs on country roads in France are very useful and a great safeguard. They indicate by certain easily read diagrams such things as railway crossings, sudden turns, dangerous intersections, steep grades, etc., and they also contain notice of the speed limit, prescribed by local regulation, through villages, on bridges, and at

other places where exceptions to the general rule are made, or where extreme care should be taken.

A few years ago most horses were afraid of bicycles; now a two-year-old colt afraid of a bicycle is unusual. A few years hence a horse afraid of a motor-vehicle may be as unusual, but in the meantime the drivers of motor-vehicles should exercise extreme caution not to cause accidents. The most inconsiderate drivers of motor-vehicles are those who have never had any horse experience. They should remember that the horse has, at least, the prior right.

*The regulations proposed would allow all the speed desirable and at the same time insure much greater safety than the present ones and also place the responsibility upon the driver more definitely than it can be done now, in case of accident, due to his carelessness.*

It is a fact that most of the accidents that have occurred through the use of motor-vehicles in cities have been caused by their being on the wrong side of the street, by crossing over on a diagonal or by turning street corners to the left without passing around the point of intersection and not through their exceeding the speed limit.

The way to reduce accidents is to enforce the traffic rules more strictly.

If all persons who drive motor-vehicles had due regard for the rights, comfort and pleasure of others; if all persons who drive motor-vehicles were perfectly familiar with the rules of the road and the other laws which are intended for the protection of the public on the roads; if all persons who drive motor-vehicles were expert and so constituted that they were sure not to become confused and rattled in a tight place in the face of danger; if all the roads were perfect in plan and kept in perfect condition; if motor-vehicles were always made so they never could get out of order in regard to the brakes and steering gear, and if they could be absolutely prevented from skidding, then it would be safe and advisable to take off any legal speed limit, provided, in addition to the foregoing, all persons and domestic animals could be absolutely relied upon not to get in the way. The realization of these conditions is, however, absolutely impossible. By a proper system of examination of drivers of motor-vehicles and legal license dependent upon it, much can be accomplished, but the personal factor can never be eliminated.

Roads can be perfectly constructed and perfectly maintained, but on account of the expense in construction and carelessness in maintenance they never will be perfect. Individual machines can be so well made that the chance of anything going wrong can be reduced to a minimum, but it would be folly to rely on every machine being up to such a standard. While it is true that almost all the accidents result from other causes than speed alone, such as turning corners wrong, cutting diagonals and being on the wrong side of the road, where pedestrians have a right to expect immunity from danger from anything coming in the wrong direction, especially in

cities, it is absolutely necessary to have some speed limitations. These speed limitations should be based on giving all the freedom possible to the automobilists, with due regard to their own safety and to the safety, comfort and pleasure of others.

There are places where it is perfectly safe for a motor-vehicle to go at the rate of 30 miles an hour and for a horse or bicycle to go at the rate of 20 miles an hour. At present it is not unusual to see motor-vehicles going at the rate of 40 and 50 and even 60 miles an hour. Better make the maximum rate a reasonable one and enforce it. I do not believe in taking off the speed limit entirely, but in so regulating it by laws, both as to speed and the responsibility of the driver, as to be just and fair to everyone.

All new methods of locomotion at first go through a crazy stage. It is but a few years since troops of bicyclists were frequently met dashing through the country making what were called "century runs." No one is so foolish in this respect now, and yet I am told more bicycles are sold each succeeding year—but they have reached their proper sphere of usefulness. It will not be long before automobile racing will be a thing of the past and great speed on the road will not be considered desirable except for the sake of getting to some distant point quickly.

The following speed regulations are recommended:

**1. A motor-vehicle, intended and used only for the purpose of carrying passengers and their personal luggage upon any highway shall not at any time exceed a speed rate of 30 miles an hour. (Note 1.)**

**2. A motor-vehicle, intended and used only for the purpose of carrying passengers and their personal luggage when upon any highway paved with asphalt or with any kind of block pavement or in any public park shall not at any time exceed a speed rate of 15 miles an hour. (Note 2.)**

**3. A motor-vehicle, intended or used for any other purpose than that of carrying passengers and their personal luggage shall not at any time exceed a speed rate of 15 miles an hour. (Note 3.)**

**4. A motor-vehicle, upon any highway, shall not at any time exceed a speed rate of 15 miles an hour while passing any other vehicle or horse which is in the act of turning or headed in the opposite direction to said motor-vehicle, whether at a standstill or moving. (Note 4.)**

**5. A motor-vehicle, upon any highway, shall not at any time exceed a speed rate of 15 miles an hour when the distance of said motor-vehicle from the nearest dwelling house is less than 100 yards, unless the road is in such condition, by reason of being wet or covered with some preparation which at the time shall render it practically dustless. (Note 5.)**

**6. A horse, or any vehicle drawn or propelled by muscular power or while coasting, on any highway,**

shall not at any time exceed a speed rate of 20 miles an hour. (Note 6.)

7. A horse, or any vehicle drawn or propelled by muscular power or while coasting, on any highway paved with asphalt or with any kind of block pavement or in any public park, shall not at any time exceed a speed rate of 10 miles an hour. (Note 7.)

8. A vehicle or horse shall at no time proceed at a greater speed than is safe and proper under the conditions then obtaining, and the driver or rider of said vehicle or horse shall exercise due care to slow down where safety demands it, especially in making turns and in crossing other highways, in narrow spaces in city streets and in passing other vehicles on narrow roads, particularly at night.

9. The driver of a motor-vehicle shall, at request or signal by putting up the hand, from a person driving, riding or leading a restive horse or other domestic animal, cause the motor-vehicle to immediately stop and shut off the power if desired and remain stationary so long as may be necessary to allow said horse or other domestic animal to pass. This provision shall apply to motor-vehicles going in the same or in an opposite direction.

*Note 1.*—It will strike some of the readers of this article that the speed rates have been put too high, but it has been done only after close study of the subject, and it does not mean that a motor-vehicle, for instance, can go 30 miles in one hour, but that it shall not at any time exceed a speed which if maintained evenly for an hour would carry it 30 miles. It probably would be impossible for it to go more than from 15 to 20 miles in one hour if proper observance is paid to Regulation No. 8.

*Note 2.*—In framing these rules mention has been made of certain kinds of roadbed or pavement as a method to determine the difference in the speed rate limit. The present rules determine it by "the portions of the city not built up, where the buildings are at least 100 feet apart." The present way is not definite enough, but the way proposed defines it absolutely. An asphalt or block pavement usually expresses the fact that the density of population and amount of traffic are greater than where macadam, telford or dirt roads are used. All other limitations which are not contained in the nine rules should be made by the use of warning signs, as explained in the first part of this article.

*Note 3.*—That passenger vehicles should be allowed to go faster than freight vehicles is evident and proper.

*Note 4.*—If one vehicle is going in one direction at a rate of 15 miles an hour and another in the opposite direction at the same rate, the resultant would be 30 miles. This rule seems very necessary in view of the fact that drivers cannot always be depended upon to slow down when they should do so, especially when the road is so narrow that they are obliged to pass close together and the least deviation due to skidding or miscalculation in distance is apt to result fatally.

*Note 5.*—The damage to property along our highways due to dust has become of such importance that it must be considered seriously and at once. Almost all country places where the houses are within a short distance from highways used continually by automobiles have become difficult to rent or sell and undesirable to occupy. Many of the crops are being ruined. The surface of the roads is carried off, increasing tremendously the expense of maintaining them. The wide rubber tires, often shod with chains and other anti-skidding devices, and the low-hanging bodies of the machines suck up everything that is movable and scatter it in vast clouds of dust far and near. The air is polluted and rendered unfit to breathe, and all on account of the lack of consideration of the few for the many. In the majority of cases the great speed indulged in is not because the occupants of the automobile have a pressing need to reach a certain place within a given time, but on account of an insane desire to go fast, with utter disregard for the safety, comfort, welfare and pleasure of others who live near or are obliged to use the roads for their own purposes. The damage to property, the health and happiness of the community, must be considered. The pleasure of the comparatively few who use

motor-vehicles improperly and thoughtlessly must be curtailed and kept within reasonable bounds. It is only the part of common courtesy to slow down when one knows or suspects he is needlessly annoying others, whether there is a dwelling house within 100 yards or not. This regulation will not prove a hardship to any one who has proper appreciation of the feelings of others, but to the road hog it will have many objections.

*Note 6.*—Regulation 6 allows a horse a three-minute gait on country roads, but it is limited by Regulation 8.

*Note 7.*—Regulation 7 allows a speed rate of 10 miles an hour, but it is limited by Regulation 8.

*Note 8.*—Regulation 8 is the one which should control the situation more than any other one. If everyone were well disposed, had good judgment and were properly trained in the management of motor cars it would be the only one needed.

*Note 9.*—This is a State law in many, if not all, of the States, except the part about shutting off the power; and while it is often a fact that a motor-vehicle passing a horse quickly is apt to scare him less than if it stops or slows down, the driver of the horse should know better as to what should be done to get his horse safely by than the driver of the motor-vehicle, who has no acquaintance with the horse which the other man is driving.

## Automobile Road Signs.

October 12, 1907.

I give herewith the signs used in France to assist motor-car drivers. I think they are put up by the Touring Club. The Royal Motor Club, of London, I am told, is about to adopt a set of signs, but they are not yet published. It is possible they may be better, or that a combination of the two would be still better. We should get the English ones and then adopt the best from each and make them universal. These signs can be read at a glance, and are a great improvement on anything we have here:

Virage à droite,		Turn to the right.
Virage à gauche		Turn to the left.
Virage avec montée,		Turn with ascent.
Virage avec descente,		Turn with descent.
Croisement dangereux,		Dangerous crossing.
Montée,		Ascent.
Descente,		Descent.
Descente sinueuse avec mauvais virages,		Winding descent with bad turns.
Passage en dessous,		Crossing underneath.
Passage à niveau,		Crossing at grade.
Rails en saillie sur route,		Projecting rails on the road.
Caniveau,		Gutter.
Mauvais pavé,		Bad pavement.
Dos d'ane,		"Thank-you-mam."
Village,		Village.

In exceedingly dangerous places a large red circle on a white ground is also prominently displayed.

The speed regulations should be National, but each state, city, town and village should have the right to still further limit the speed rate, and when it elects to do so, it should erect a sign and light it at night. I suggest the following as different from the rest, and easily made out:



The upper part of the sign indicates that there is reduction of the usual speed rate required, and the lower part tells the rate which must not be exceeded.

National Rules of the Road and National Street Traffic Regulations for all cities and villages will still further enhance the pleasure, comfort and safety of motoring and driving.

A National Bureau for examination and licensing of motor drivers and numbering of the machines will do away with much red tape and complication.

The only way that effective punishment for disobedience of the speed laws and traffic regulations can be obtained is by suspending or repealing the license, as it deprives the amateur of his pleasure and the professional of his means of livelihood. Examinations preliminary to the license will prevent unskillful drivers from getting a license. The license should be in the form of

a small book, which should contain the photograph of its holder and ample personal description. Whenever an arrest is made it should be recorded in the license book, thus enabling complete tabs to be kept on the driver.

The complication of more than one number on a machine will be done away with, but the one number required and recognized everywhere in the United States can be so devised as to clearly show the state, territory or district where the owner of the machine lives.

Every decent owner or user of an automobile is now suffering from the willfulness and selfishness of the reckless owner or user, which has resulted in a confusion and multiplication of senseless laws in the different states, which should give place to National laws in force everywhere.

We should have, therefore:

1. National Street Traffic Regulations and Rules of the Road.
2. National Speed Regulations, limited by means of signs, as herein described.
3. A National Board of Examination and License of Drivers and Numbering of Machines.
4. A system of road signs similar to those in France.

## CHAPTER II.

**This Chapter Consists of a Collection of Articles and Speeches Arranged in Chronological Order to Show the Development of the Work. In Reading Them the Dates of Their Original Publication or Delivery Should be Borne in Mind.**

### **Street Traffic Regulation from an Economic Standpoint.**

Published Jan. 2, 1904.

There are approximately 4,500,000 people (including increase since last census, transient and suburban), horses and vehicles (including street cars, stages, automobiles and those drawn by horses) in the City of New York.

If by the best method of street traffic regulation enforcement the average saving of time per person, per horse and per vehicle per day could be made 15 minutes, or one-quarter of an hour, or slightly over 1 per cent. of the 24 hours, the aggregate saving would be  $4,500,000 \times \frac{1}{4} = 1,125,000$  hours per day, or 410,625,000 hours, or 17,109,375 days per year.

If the average value of time per day per person, per horse and per vehicle is \$2, we have  $17,109,375 \times 2 = \$34,218,750 =$  aggregate saving in dollars per year. The cost of the best possible system of street traffic regulation, even if it reached \$5,000,000 per year, would be less than 7 per cent. of the saving. The net saving would be \$29,218,750.

The foregoing figures are necessarily conjectural, but are based on four years of work on the subject. Study by others would doubtless result in both larger and smaller estimates. If, however, we divide my figures by 5, we shall still have \$6,843,750 gross saving, or \$1,843,-

750 over and above the cost of the proposed system of traffic regulation. In other words, if even the last figures be true, New York cannot afford not to spend \$5,000,000 per year if it can get back this cost plus \$1,843,750, which is an interest of 37 per cent. above the outlay.

This view is simply from a money standpoint. If we add the saving of life and limb and nervous energy which would result, we begin to form an idea of the importance of attending to this matter at once. The saving of life and limb and health means also the desirability of New York as a place to live in, to do business in and to sojourn in, and is very closely allied to its future prosperity in countless ways that mean money as well as the happiness and welfare of its inhabitants.

The system of traffic regulation alluded to is the one in use in London and other foreign cities. Its salient features are a Bureau of Street Traffic, with a Chief of Bureau himself a member of the police force, and outranked only by the Commissioner of Police. He should be appointed by the Mayor. The charter of the City of New York should be amended to provide for the appointment. He should frame the necessary rules and regulations for traffic management and enforce them. The whole subject of street traffic regulation, including licenses, should be in his hands.

Our experience only lately with the passing by the

Board of Aldermen of a set of ordinances for the better regulation of traffic is reason enough why the power should be taken from them and put where it belongs, i. e., in the hands of the police, who enforce the traffic regulations, and are in a position to know the requirements and should make the rules to be followed.

The ordinances adopted were originally written carefully for the Aldermen, but they so hurt them by omitting the things most needed, adding others worse than useless, and generally mixing them up, that they had better have them left alone, and this only after having had the ordinances in their hands for about two years.

During this time something had to be done, and the folders with rules for driving were issued by the Police Department (50,000 are out and 50,000 more being printed). One hundred enameled signs are up and 300 more ordered. The block system has been established at important points. Six mounted policemen have been put on Fifth Avenue. The police have been instructed in their duties, and the drivers are gradually being educated in the rules, and will become in time themselves enforcers of traffic regulations, as they learn their rights and resent interference in them by others.

The police are doing about the best they can with the present force. They will become somewhat more proficient in time, but their control is limited by their number. There is no reason why we should delay or experiment with any makeshift or new system. That in use in London is the best so far tried. The Metropolitan Traffic Act of Sydney, N. S. W., revised in 1901 from the London Traffic Acts, is a model of simplicity and practicability, and can easily be adapted to local conditions in New York.

There is no reason why—if the new administration will take the matter up immediately and get the Charter amended—we should not have, before three months have gone by, as nearly perfect a system, properly enforced, as is possible anywhere; especially is this so, as by doing it a large sum of money will be saved annually to the people of New York.

It is a reflection on the intelligence of the community that it is willing to stand such a state of affairs as now exists. The regulation of street traffic is better than it was when I began to write about it, but as it has become better the conditions with which it has had to contend have steadily become worse, and it is only to a close observer that improvement is evident.

Anyone who thinks and observes will see that there is nothing of more importance to the prosperity, health and happiness of New York than the best traffic system that can be devised, which must be self-expanding, and if we demand it we shall get it in time, but why not now?

Committees have from time to time been appointed to investigate and see what could be done, but they have accomplished nothing. The whole matter has been carefully and fully investigated, and if the administration will simply prove my figures and statements and act, following the steps I have mapped out, the street traffic problem

will be solved for the present and for the growing needs of the future.

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### Street Traffic and Civic Transportation.

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**Remedy for "Cruising-Cab" Nuisance—Underground Cross-town Railways—Importance of Complete Plan for Future Rapid Transit and Tunnels for Sewers, Pipes and Wires Before More Work is Begun.**

March 12, 1904.

The advantages to be derived from putting the cross-town surface cars below ground, at least through the middle or backbone of the city, say between Second and Tenth Avenues, are as follows:

Their interference with north and south traffic would be eliminated.

The streets now occupied by tracks would be free for other traffic east and west.

The speed could be increased and more safety insured.

The disadvantages would be the initial cost, small in proportion to the results to be obtained, and the necessity of going up and down by stairs, escalators or elevators.

Besides these reasons, pro and con, there is the great gain to be derived, on the wide streets, such as Canal, Fourteenth, Twenty-third, Thirty-fourth and Forty-second, of space in the middle of the street for public hack-stands at convenient distances apart.

Most of the trouble from so-called "cruising cabs" comes from the fact that there are not enough cab-stands to accommodate them. The drivers are obliged to drive up and down to ply their trade. If cab-stands were located at convenient places, at short intervals, this would be, to a large measure, done away with. It is only in the wide streets that it is possible to have cab-stands in the middle and allow sufficient room on the sides for traffic. On the streets named there is ample room. Cab-stands should never be located next the sidewalk in front of private property without consent of the owners, probably impossible to obtain; consequently the few places available are alongside parks and squares.

The only suitable streets now sufficiently wide for cab-stands in the middle are Fifty-seventh and Seventy-second, and these should be made use of for this purpose now. There are other wide streets farther up town, but they are too far from the centre to be of service at present.

If Fourteenth, Twenty-third, Thirty-fourth and Forty-second Streets and Fifty-ninth Street along the Park were added, there would be ample room for stands about half a mile apart, from Fourteenth Street to the Park, and Canal Street would furnish one at a convenient place down town. Behind the cab-stands—except on Fifty-ninth Street, that is, further east and west—there would be ample space for truck stands.

I believe the above plan furnishes the solution of the cab nuisance generally, and of the traffic problem at the Grand Central Station, and at Fifty-ninth Street, and, to a lesser degree, in this relation, at the other places named,

in the following order of importance: Thirty-fourth, Twenty-third, Fourteenth and Canal Streets.

At the Grand Central Station cabs and carriages should take and leave passengers on Vanderbilt Avenue, and the Madison Avenue cars should go up and down to and from Forty-second Street on Madison Avenue and not on Vanderbilt Avenue, which is now or has been until recently used for cars going north.

A cab-stand should be established on Vanderbilt Avenue, on the west side, extending from Forty-third to Forty-fourth Street, and around the corner of Forty-fourth Street on the south side to Madison Avenue. These changes should be carried out at once. The sinking of the tracks on Forty-second Street would allow ample space for a cab-stand in the middle of the street, extending from Park Avenue as far east as required; another from Fifth to Madison Avenue in the middle of the street, and another from Fifth Avenue west as far as required, on the south side of the street from Fifth to Sixth Avenue, and from Sixth Avenue west in the middle of the street.

The present hotel cab system should be done away with. Cabs at hotels should be the regular cabs, licensed by the city and charging the same fares as those at other cab-stands. Hotels sell their cab privileges, to which they have no legal right. It results in no better service and in higher fares. Electric cab signals from hotels to the nearest cab-stand could be installed. Patrons of hotels desiring something different should have it ordered at the office from a livery stable.

The sinking of the crosstown car tracks should be part of a complete system mapped out beforehand and far reaching enough for all future needs. This is necessary to avoid having one thing interfere with another, therefore requiring work to be done over again at a tremendous increase in cost, and inestimable inconvenience to the public. It is evident that where tracks have to cross at different levels these levels should be determined before any work is begun.

If the surface traffic, other than that on rails, goes on increasing at the present rate all tracks must eventually be put under ground or elevated.

The writer has always favored buying the right of way through the blocks on either side of the city, far enough from the centre to avoid prohibitive cost. Twenty-five feet wide for the actual roadbed would be ample. This would give two tracks underground for express trains, two surface tracks, and two tiers of elevated tracks, one for local express and one for accommodation trains, and a bicycle and perhaps an automobile path on top of all on each side of the city. Notwithstanding that one of these highways would have to be east of Third Avenue and one west of Sixth Avenue, the average distance required to walk to them would be less than at present to the Sixth and Third Avenue stations, because one would have to go east or west to the surface line only and transfer at the nearest station to local or express

trains as desired. Probably both this and many underground roads will eventually be required. The large number of tracks that this "*right of way through the block system*" would furnish probably would make it fully as economical in proportion to its capacity as the underground method. It is simply a question as to which should be done first, but both should be planned for now.

Our rivers as well as our streets are getting more congested every day, and we must sooner or later give them up entirely to longitudinal traffic. The ferryboats will have to be superseded by bridges and tunnels, and as the approaches to these involve questions of grades and levels they should all be located in plan now.

It seems impossible that such a tearing up of streets as we are passing through for the underground road should be necessary. Similar roads have been built in London and in Paris with surprisingly little disturbance of the surface or inconvenience to the people.

New York can never have uninterrupted street traffic or good pavements until we put an end to the digging up of the streets for sewers, pipes and electric wires. It is also a source of unhealthfulness and constant inconvenience. In Paris, the sewers are in tunnels and the wires and pipes also. The initial cost of this method is greater, but in the end is much more economical, and the cost of maintenance is much less and probably many times less, when health and convenience are taken into consideration. In this, also, comes the question of grades and levels, and the sewer and the underground railroad plans should be worked out together.

That nothing further should be undertaken in the way of sewerage or underground railroads, further than to keep in repair what we have and to complete what is in course of construction, is evident until a complete plan has been made and adopted. It should comprise not only what we need now or will need in twenty years, but a complete sewerage system for the entire city and a complete underground railway system, especially for Manhattan and the Bronx, including an underground layout for every north and south street that can be used for such purpose. Once such a plan is adopted the work should be begun immediately on the parts most needed and the others added as increased transportation facilities call for them. The engineering problems, which must be worked out to make the future of New York what it ought to be, are extremely difficult and complicated, and we should have the best board of engineers that can be obtained, and the work should be begun at once. What has been already done in this direction is not sufficiently comprehensive. In all architectural and engineering work the more complete the plans the more economical the work and the less changes there have to be as extra things are added in the future. When in the complete plan there is an intersection on the same or different levels, of one roadbed with another, or of one sewer with another, or of a roadbed with a sewer, the excavation at the intersection should be made for both when the first

one is built, as otherwise the construction of the second part of the work becomes much more difficult and expensive.

The underground road now in course of construction is probably all right, so far as the road itself is concerned, but it will doubtless interfere with and make more difficult other improvements that are to come than if they had been foreseen and planned for at the outset. Had this been done the tunnel could have been so laid out and constructed as to accommodate itself to and combine itself with the requirements of the future.

The question of restricting the height of buildings for future construction is of great importance from a traffic and transportation standpoint, as well as from many others. Whether it is possible to pass a law on this subject which will hold or not I do not know, but it certainly should be done if it can be, and without more delay. If a building seventy-five feet high is replaced by one three hundred feet high its population is practically multiplied by four, but the street upon which it stands remains the same width. This is only one of the many ways by which our streets are becoming more and more congested. The new underground road, soon to be put in operation, will for a short time slightly relieve the pressure, but it will be but a drop in the bucket, and in a few months conditions will be as bad as ever. There is but one thing that should delay us in pushing ahead with new transit lines, and that is a complete plan for all that can be done to help matters in the future. Once the plan is made and adopted, the work should be begun and pushed ahead on the most important parts as fast as possible till the supply of transit facilities is abreast of the requirements, and then its speed should be proportionate to the increase in population.

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### Street Traffic Regulation.

A SYNOPSIS OF WHAT HAS BEEN DONE TO INTRODUCE IT,  
WHAT IS NOW BEING DONE, AND SOME OF THE  
MOST IMPORTANT THINGS THAT ARE  
NEEDED TO PERFECT IT.

Address delivered at the annual banquet of the Automobile Club of America and printed by it, January 21, 1905, by the author:

GENTLEMEN.—I have been asked to tell you about street traffic. It is not a very happy subject for an after-dinner speech, though there is scarcely anything of more importance to all who use the streets and to automobilists in particular.

Street traffic regulation is the regulation of vehicles so that they interfere with one another as little as possible, that they can go from point to point in the least time, with the least danger to each other and to pedestrians. This can be brought about by simple rules, enforced by the police, and by educating the drivers in the observance

of these rules. Experience has shown in London that the drivers have themselves proven the best regulators of street traffic because, knowing their rights, they resent interference in them by others, either through ignorance or intention. It becomes, therefore, of the first importance to educate the drivers and make them, as well as the police, the regulators of traffic under the rules with which they must have been made familiar.

Five years ago there was absolutely no regulation of street traffic in New York City. Almost everywhere blockades were frequent, though the traffic was much less than now. It took hours and frequently the best part of a day to ship goods to the downtown docks, with charges for service proportionate to the time consumed. In January, 1900, work was begun to introduce street traffic regulations, but for over three years it resulted in no tangible results, except that the public was made to realize that much of the trouble was due to stupidity and lack of rules and police enforcement of them.

With a *police force absolutely ignorant* of traffic management, drivers unaccustomed to restraint by the police, no rules for driving, and no ordinances at all adequate to the requirements, it was *most discouraging work*.

More than a year before this, a set of ordinances for street traffic management had been carefully framed and were introduced in the Board of Aldermen. By mistake they were given to the wrong committee, and finally shelved by political influence for months. The Police Department was clamoring for the new ordinances, but without result, and for a time it seemed hopeless. In the fall of 1903, a careful re-examination of the city ordinances, State laws, Penal Code and City Charter was made. It was already known that some cases were covered by the old ordinances, but it was not realized that the Greater New York Charter gives the right and makes it the duty of the Police Department "to regulate the movement of teams and vehicles in streets, bridges, squares, parks and public places."

Several attempts have been made to pass ordinances to regulate the occupancy of certain streets between certain hours by slow-moving vehicles. Evidently the provision of the Charter was not known to the framers of these unnecessary ordinances. At this time it was thought best not to call general notice to the powers given by the Charter in regard to trucks because the Truck Drivers' Association had considerable political influence, and it was feared that it might be exerted to block all attempt at street traffic reform. Special attention was called to the powers conferred by the Charter in the *Rider and Driver* of December 24, 1904. This seems to have been the first knowledge that the public had of these powers.

The provisions of the Charter were placed before General Greene and he was told that folders of Rules for Driving were to be issued for the education and information of drivers, and that it was desired to have them officially indorsed and issued by the Police Department. His ap-

proval was also asked of the proposed enamel signs which read, "Slow-moving vehicles keep near right-hand curb. Rules for driving can be obtained at all police stations." General Greene acceded to the requests. The folders were gotten out immediately, and the signs put up as soon as they could be made. From this move dates the real beginning of street traffic regulation. It is impossible to regulate anything, except by brute force, unless you inform the people to be regulated what you want them to do. The rules for driving and the signs do this, and they have done more than all the rest together to make it possible to regulate street traffic.

Several months after this move had been made the Board of Aldermen proceeded in great haste to take up the ordinances which had been given to them so long before, and after renumbering the articles and sections, changing their logical order and in some cases their wording, leaving out some things and putting in others, they presented them to the Mayor for his approval. By request the Mayor appointed a public hearing. By this time the proposed ordinances had been carefully compared with the original ones, and it was agreed, if a few of the worst features were left out, it would be better to let them go through as some of the articles covered cases that had not been covered before. Some of the other bad features were repealed afterwards by the work of a committee of the Chamber of Commerce.

The Charter, however, gives all power required to regulate traffic. . . .

The situation when the new party came in was as follows. We had a thoroughly trained man in charge, in the person of Captain Piper, the police had been instructed in their duties; rules for the instruction of drivers had been issued, enamel signs were up. The block system was in force. Regulations for management of carriages at theatres were in force, though imperfect, as they still remain.

The change in government last year brought about the temporary setback which all such changes do. Six months passed with a steadily increasing backsliding. Lately renewed energy has set in, more men have been employed, and great interest is being shown. One very serious mistake has been made, however, by neglect in keeping drivers supplied with the "Rules for Driving," and they have been difficult to control because they had no means of knowing what was wanted. The Police Department is having copies of the ordinances printed to distribute to drivers. This will be on a par with using a copy of Chaucer in a kindergarten. Both the "Police Rules for Driving" and the ordinances that passed, and that have not been repealed, were taken almost entirely from the ordinances which I introduced in the Board of Aldermen, but the "rules," printed in folder form, are concise and simple, and suitable for instruction, while

the ordinances are not. The use of the folders should certainly be continued. I have prepared a revision of the contents of the folder which I recommend instead of the old one, if a new supply is printed.

Those of you who have observed the management of street traffic in both Paris and London have probably noted the difference. In Paris the number of police employed appears much greater than in London, and where the police are present things go smoothly through their active direction and enforcement, but just as soon as there are no police near everything is confusion. The reason is that the drivers do not know the rules and are simply forced into place by the activity of the police. In London it is quite different; the drivers all know the rules, and the presence of the police is principally needed to give the signals where the lines of vehicles have to be stopped for the block system at the intersection of crowded thoroughfares.

The policeman acts the same kind of a part that a prompter does in the lancers, where all the dancers know the figures and execute them when he calls them out.

A traffic office has at last been started. It should be made a permanent institution with branches throughout the city. There should be a commissioner or superintendent of street traffic, with permanency in office assured during efficiency.

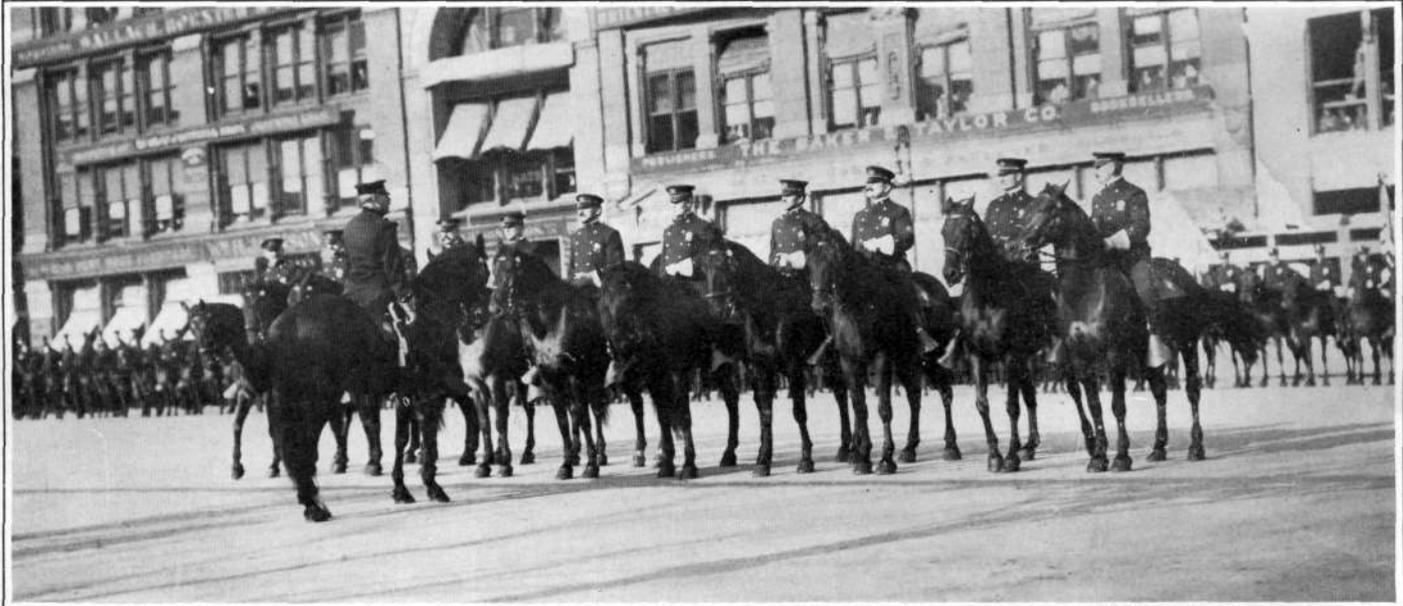
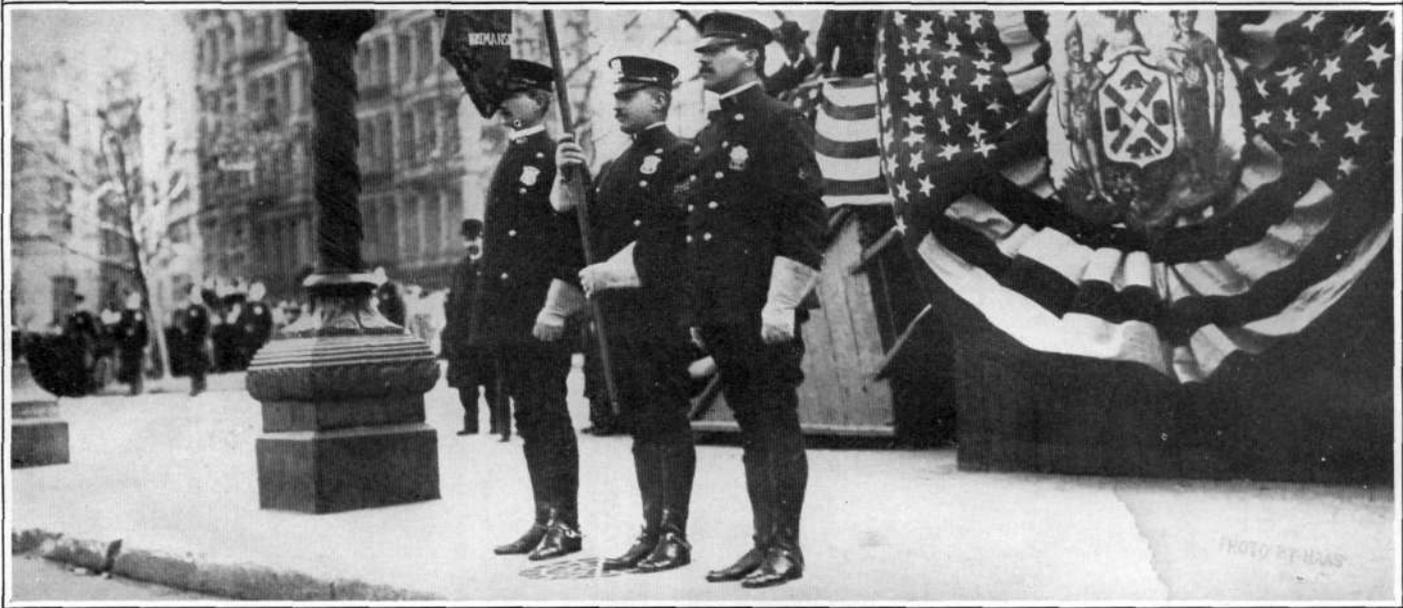
Special regulations for the management of vehicles at congested points have been put in force. These regulations, however, have not been carefully enough considered before adoption, and, while an improvement on old conditions, are occasioning considerable unnecessary hardship. These should be changed.

Your attention has been called to the provision of the Charter which gives the right to and makes it the duty of the Police Department "to regulate the movement of teams and vehicles in streets, bridges, squares, parks and public places." This covers all powers necessary to make such regulations as are required and to enforce them.

What is needed now is that the Penal Code shall provide that the infraction of any regulation of the Police Department for traffic management shall constitute a misdemeanor, in a similar way that it covers the requirements of the Health Department.

With this done, there will be no necessity of any new ordinances, nor of the ones we now have in relation to street traffic.

There is little doubt that the annual saving of money through loss of time to the people of New York, even with our present imperfect and crude traffic management, over the conditions of three years ago, would more than pay the expense of maintenance of the entire Police Department, and that the lives saved can be counted in the hundreds and the accidents avoided in the thousands.



PRESENTATION OF FLAG BY SYRACUSE FAIR COMMISSIONERS, NOVEMBER, 1908



STOPPING RUNAWAYS IN CENTRAL PARK

*EXTRACTS FROM RECOMMENDATIONS TO  
the President Regarding the Administration of the  
Affairs of the District of Columbia, by James Bron-  
son Reynolds.*

THE WHITE HOUSE, WASHINGTON,

FEBRUARY 24, 1906.

MY DEAR SIR:

In my message to the Fifth-ninth Congress at the beginning of the First Session I said:

"The National Government has control of the District of Columbia, and it should see to it that the City of Washington is made a model city in all respects."

To promote the above and kindred objects of good government I hereby request and authorize you to act as advisor (or special commissioner) to me, to investigate social conditions in the City of Washington and the administration of the City Government in its above-named relations to the people of the District of Columbia.

I wish your investigation to terminate in definite, practical recommendations to me with reference to the city's present needs and most notable defects measured by the highest standards of good administration in this country and elsewhere.

I will request that you present to me at your early convenience an outline of your plan of work, indicating the main lines of investigation which you find it practicable to undertake.

Very truly yours,

THEODORE ROOSEVELT.

JAMES BRONSON REYNOLDS, Esq.,  
New York City.

THE HIGHLANDS, WASHINGTON, D. C.,

April 29, 1907.

*The President, The White House, Washington, D. C.*

SIR:—I present herewith my final report on the affairs of the District of Columbia.

In your formal instructions to me you wrote: "I hereby request and authorize you to act as advisor (or special commissioner) to me, to investigate social conditions in the City of Washington and the administration of the city government. I wish your investigation to terminate in definite, practical recommendations to me, with reference to the city's present needs and most notable defects measured by the highest standards of good administration in this country and elsewhere."

It was my original plan to present a detailed program relating to the various fields of municipal activity. My study of the situation, however, as well as the pressure of other work, determined me to make my suggestions of a more general character.

Very respectfully,

(Signed) JAMES BRONSON REYNOLDS.

II. THE DEPARTMENT OF POLICE AND FIRE.

The efficiency and good conduct of the Washington Police Department in the performance of regular patrol

duty, and the excellence of its administration, seem to me to merit the high praise both have received. Police administration, however, in the large cities of the world has of late years extended its responsibilities beyond that of patrol service. The police force is no longer a band of civil soldiers to catch thieves and break up mobs. In the best governed cities of Europe the criminal division of the Police Service is a well organized Detective Bureau, and is independent of the patrol division. Other Bureaus have been added to regulate crowds, transportation and traffic; to license cabs, carriages, express wagons, trucks, push-carts, street stands, shows, exhibitions, markets, etc. Some of these Bureaus are already needed in Washington, and would locate responsibility and promote efficiency and good order in street service.

The need of a National Police Bureau of Information at Washington has already been recognized by the Commissioner and Chief of Police. Its enlargement and extension would be a most important service to the whole country.

Even to meet adequately its present obligations of patrol service the police force should be enlarged. The Commissioners have recommended to the Congress an increase in the number of patrolmen. To meet their recommendation, supported by numerous petitions for better protection, and to carry out the suggestions that I propose below, an addition of one hundred to the force is needed.

I suggest the establishment of the following Bureaus under the Police Department:

Bureau of Transportation.

This Bureau should enforce all ordinances in relation to street traffic, licensing of cabs, carriages, express wagons, trucks, push-carts, street stands, and have care of lost articles. It should give particular attention to the enforcement of ordinances regulating the use of the public highway by carriages, trucks, automobiles and bicycles. In the consideration of this subject I have had the aid of Mr. William P. Eno, who rendered valuable service in establishing the rules of the road in New York City. In a conference with him and with Commissioner West and Major Sylvester the importance of such regulations was recognized, and certain of them have already been put into operation.

I urge also a consideration of the introduction of taximeters to be attached to all cabs hired on the streets and at railway stations. I made a personal investigation of the use of taximeters in Berlin and Paris, questioning police officials, cab drivers and citizens, and from all three had unqualified approval of them. The police stated that the adoption of taximeters had driven many dishonest drivers out of the cab service. The drivers declared that former conflicts between them and cab owners regarding the return of the full amount of fares had been eliminated, while citizens generally testified to the removal of irritating conflicts with cab drivers, formerly

inevitable. I may add that the London authorities have recently voted to introduce the taxameter into that city, and that a private taxameter cab company has been organized in New York. I recommend that this important improvement in the cab service of the National Capital be adopted. I am glad to state that Commissioner West is giving the subject consideration.

### The Taxameter Cab.

Published June 8, 1907.

Now that the taxameter is soon to be introduced in New York it may be of interest to the general public to know more about it.

I have sent to the Lenox, Mercantile and Astor Libraries and to the office of *The Rider and Driver* copies of the "Report from the Select Committee" of London on "Cabs and Omnibus Bill," printed by Wyman & Sons, 109 Fetter Lane, E. C., with the request that they keep them for reference. This bill gives very full information in regard to the use and advantages of taxameters and I refer the reader to it for more detailed information.

I assume that there can be no difference of opinion, among those who have seen it working, as to the advantages of the taxameter over every other system yet devised. Perhaps its most important feature is that it absolutely prevents any question as to the amount of fare due at any given time. The present taxameters are made separately and attached to the vehicles, and are rather clumsy and unsightly. There is no reason why they cannot be made a part of all new vehicles and in such a manner that they will be inconspicuous, with nothing in sight but the dials and the arm which indicates whether the vehicles are engaged or not. I append here a suggested tariff for cabs in the City of New York:

Hansom cab, or cabriolet, intended for 2 persons.	Taxameter shall register on throw of lever at start		Cts.	Minutes	Dial to show no increase till 1 mile, or are passed at the termination of either of which the taxameter shall indicate 5 cents more, or in all	Cts.	Minutes	and so on, at the end of each extra one-fifth mile, or of each it shall indicate 5 cents till the end of hiring.	This is at the rate of				
	Cts.	Minutes							For distance	For time	Per hour		
Closed Four Wheeler, one horse, 3 persons.	.50	30	.60	30	.70	30	.85	30	First mile	.50	.25	.50	.75
Four - Wheeler, Two horses, 4 persons.	.50	30	.90	30	.90	30	.85	30	After first mile	.65	.35	.65	1.00
Automobile, persons.	.50	20	.50	20	.35	20	.50	20	For time	.50	.25	.65	1.00
Automobile, persons.	.65	15	.65	15	.70	15	.85	15	First one-half hour	.65	.35	.85	1.50
									After first one-half hour				

It may seem strange at first, perhaps, that such a difference has been made between the tariff for hansom cabs

or cabriolets and closed four-wheelers for one or two horses. The latter two are dependent to a certain degree on bad weather or night work for preference to be given to them. They are also more expensive to build and maintain, and somewhat heavier. For automobiles the tariff has been made no greater for distance, but somewhat greater for time.

#### Extras for distance going away from advantageous locations for hiring.

If a vehicle engaged within the following limits:

Sixtieth Street on the North,  
Tenth Street on the South,  
Third Avenue on the East, and  
Eighth Avenue on the West,

is not brought back and given up at the end of hiring within five North and South blocks or two East and West blocks of the above described areas (blocks made by Broadway or any street or avenue running in a northerly and southerly direction other than numbered avenues not to count) the driver shall record an extra fare of five cents for each five North and South blocks or each two East and West blocks from such area. If a vehicle taken outside of the above described area shall at the end of hiring be left further away from said area than the point at which it was taken, the driver shall record five cents for each five North or South or for each two East or West blocks.

#### Extras for persons above the number the vehicle is intended for, and for luggage:

For each extra person over:	<ul style="list-style-type: none"> <li>2 in hansom . . . . .</li> <li>3 in cabriolet . . . . .</li> <li>3 in 1-horse four-wheeler . . . . .</li> <li>4 in 2-horse four-wheeler . . . . .</li> <li>3 in auto intended for 3 . . . . .</li> <li>4 in auto intended for 4 . . . . .</li> </ul>	10 cts.	The driver of any public vehicle shall not be obliged to carry more than one extra person at any time.
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Extras for luggage.

For each trunk or equally large package carried on top, behind or on the box 10 cents. Small packages no extra charge.

In planning the construction of new automobile taxameter cabs particular attention should be paid to making them so that they will turn shorter than those now in use in Paris. Their turning diameter should not exceed twenty feet and less would be better.

It should not be forgotten that no vehicle should back in order to make a turn in any city street if by so doing it interferes with other vehicles, but should go around the square or to a street sufficiently wide to turn in without backing. Some such rule as this has become necessary, as now an inconsiderate driver of an automobile or other vehicle will often hold up the whole street because he is too piggish or lazy to go around the block or to some wider street before turning.

Care in planning the taxameter cabs will save trouble in the future in having to obey the traffic rule to which I have alluded and which it will be found will have to be made to avoid unnecessary traffic delays.

### Mayor McClellan's Speech.

The following address was delivered by Mayor McClellan on March 5, 1908, at the presentation of a flag to the Traffic Squad by the New York State Fair Commissioners. Viewed in the light of the facts I have stated regarding the origin and progress of Street Traffic Regulation, beginning in the year 1900, and its temporary setback in 1904, his claims seem to be at least apocryphal:

"Men of the Traffic Squad: *Although there were entries from many other cities*, when it was known that a detail from this department had been entered at the Syracuse State Fair, there was a general assumption on the part of the people of New York that you would win everything in sight. This assumption has been fully realized.

"The people hardly realize what you have accomplished in five years. *When I took office five years ago I found traffic conditions absolutely intolerable*. If New York wished to continue to do business it was essential that her traffic be regulated. *Some little had been accomplished on paper by my predecessor, but nothing practical had been done*. *When we began to enforce our traffic regulations we did so in opposition to the great majority of our people*. *Even the higher officials of the Police Department thought it was impossible, and it required a direct executive order from me even to begin the work*. The police magistrates were not in sympathy with the movement, those who used the streets complained most vigorously, and even the courts tried to stop us by injunction. *We were sustained by the Court of Appeals, but more than that, we have been sustained by a court from which there is no appeal—public opinion*.

"In the city of London, with a population of about six and a half million people, and a police force of nearly 19,000, it requires 4,200 (?) men to enforce the traffic regulations. In this city of four and a half million people and a police force of only 9,000 men, 600 (?) men regulate traffic. In other words, with a population only about 25 per cent. larger than ours, it requires 700 per cent. more men to do what our men are doing quite as well.

"Lord Tennyson immortalized another six hundred men who sacrificed their lives in hot blood because of an inexcusable mistake. The people of New York are immortalizing you because in cold blood you are risking your lives in making it possible for the commerce and business of New York to be safely and quickly conducted. In less than five years you have done the almost impossible.

"One of my opponents when I last ran for Mayor made one of his most popular points in promising that if elected he would immediately abolish the ridiculous, oppressive and despotic traffic regulations. To-day no candidate for office would dare to do other than praise you and your work. You have converted the people of New York from opposition to a cheerful and ready co-operation in the enforcement of the traffic regulations, and it

has been because you have shown courage and firmness and tact and courtesy.

"You can feel that your reward for hard work has been achieved in the warm place that you have acquired in the affections of your fellow citizens. To you, to Commissioner Bingham, to Deputy Commissioner Bugher, and to Inspector Schmittberger the thanks of our people are due."

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### Police Horses, Equipment and Uniforms.

The Police Department obtains its horses by contract under specifications duly advertised in the *City Record*. The price per horse during the past two years has ranged from \$285 to \$310. The specifications call for sound bays, with black points, from 15½ to 16 hands high and from four to seven years old. After selection they are sent to the Department Training Farm, and if within a probation period of thirty days they prove unsuitable for police work, especially as regards intelligence, they are rejected.

Commissioner Bingham took exceptional interest in the selection of the horses, having had, in addition to the regular Deputy Commissioner and veterinary surgeon, a personal representative, Major Charles A. Benton, U. S. A. retired (not connected with the Department), present when the horses were selected, and it is largely due to his superior knowledge and care that the type recently purchased has been so appropriate and of such high quality. Formerly the horses were selected without much regard to fitness or appearance—lately they have been chosen with extreme care. Most of the stables were in cellars, while now they are all above ground, well lighted and ventilated, and a farm for training and resting the horses has been provided on Long Island. Much of the credit for these improved conditions also is due to the same gentleman, and every man of the mounted squad is grateful to him for having a better horse to ride. Credit is likewise due to the trainers who have taken the raw material and turned out the finished product, and to a drill master whose equal would be hard to find. With only occasional opportunities for practice, he has made a better showing than is often seen in any of our cavalry regiments with their regular and continued drills, though it is but fair to say that our cavalry are usually furnished by our pound-foolish government with mounts that are little better than caricatures, and which would make a real horse shy if he met one of them on a dark night. The practice of keeping the horses always on a walk is very bad. They should have the exercise of trotting and cantering from time to time.

The saddles and bridles are of poor quality and improper shape. For such hard and continual use, only the best grade is economical. The high cantle tends to throw the rider forward when his horse falls, and increases the chance of injury; this tendency is increased by the fact that the stirrup leather is hung about an inch and a half

too far back. It is not fair to handicap men who often have to perform most dangerous duty by giving them unfit equipment and thereby unduly increasing the risk. The saddle should be of the usual English hunting model with not over  $3\frac{1}{2}$  in. dip. The head should be square, as it gives more room to slide forward. There should be no knee rolls. A thin skirt soon forms into a depression which provides a more secure place for the grip of the leg. The saddle should be padded and lined with a good quality of leather—not with cloth, which soon wears out and allows the padding to get out of shape. A numnah of the form and color of the saddle should be used when needed. The box stirrups should be replaced by open ones of steel, which allow greater comfort in the change of position of the feet, as well as more safety and better seat when stopping a runaway.

The bridles should be of most durable quality and have studs instead of buckles. The bradoon should be of the Baucher pattern, and the bit should have a wider and easier port, affording more room for the tongue. Bits and stirrups of polished steel look more workmanlike and are stronger than any of the non-rustable varieties and the little extra labor of keeping them bright is unimportant.

The uniforms are altogether inappropriate. The coat should have a vent of suitable length in the center of the back, instead of those at the sides, which cause it to hunch

up over the cantle. It should have a higher waist line and be fuller below. The overcoat is entirely unsuitable, being of infantry pattern, too clumsy and not cut in proper shape for the purpose. An overcoat on the lines of the cavalry style should be adopted. The breeches should be cut like ordinary riding breeches, quite full at the thigh. Similar criticism can be made of the uniforms of the men on foot. The body coat should be of better cut. The overcoat should be more in the form of a boxcoat. The overcoat now used is not only uncomfortable and ugly, but seriously hampers the men when they have to run or perform other violent duties. Uniforms properly designed, cut and fitted should cost no more than improper ones and would certainly be much more serviceable and impart a smarter appearance.

The usual police club is unsuitable for mounted men's use. It is too short to reach far enough beyond the horse's head, and is too thick and heavy. A hickory stick three-quarters of an inch thick and thirty-nine inches long would be far better. It should have a leather strap to slip the hand under when necessary to use it like a saber. The upper end should be slightly weighted so as to balance properly for quick work. The advantages of this stick over a police club will be apparent to any one at all familiar with broadsword, saber or single-stick. It is a far more efficient weapon and at the same time is less apt to inflict lasting injuries than a club.



The following article by Mr. Wm. E. Curtis was found just as I was contemplating one on the same subject, and as it is much better than I could have hoped to do I have reproduced it here with his permission. The text book to which he alludes, entitled "Duty Hints for Constables and Section Sergeants," is admirable and a similar one should be in use wherever there is a police department. Too much stress cannot be put upon its adoption, especially as it would cost so little and add so much to the efficiency of the force.

# POLICEMEN OF LONDON

Policy Followed by the Department Is Unique.

PRAISE FOR FEW ARRESTS.

Desired That Petty Cases Be Kept Out of the Courts.

"FRIENDLY HAND" TO ERRING.

Perfect Organization of the Force, Which Extends Over an Area of 699.42 Square Miles.

BY WILLIAM E. CURTIS.

Written for *The Washington Evening Star* and *The Chicago Record-Herald*, March 6, 1909.

The policy of the police department of London is unique, and differs from that of other cities in one very important particular. A patrolman, or a "constable," as they officially call the members of the rank and file, are commended for the arrests they do not make. The constable who brings in the smallest number of prisoners, who appears most infrequently as a prosecuting witness in a police court, receives the highest credit. The officer who can settle difficulties on his beat outside the station and does not trouble the police judges is considered the most capable and efficient in the performance of his duty. This, of course, does not refer to penal offenses, to burglary, larceny, murder or similar crimes, but to petty offenses such as assaults and disorderly conduct, which make up the greater part of the business of the police courts in our cities. When the London policeman finds two men quarreling he endeavors to reconcile them. When he finds a drunken man he takes him home; when he catches a boy pilfering he talks to him kindly and cautions him not to do it again; after the second offense he takes him to one of the many private institutions for the reformation of the young, and thus protects the urchin from the stigma that a police court always leaves.

Thus the policeman is the friend rather than the foe of the people on his beat, and they know he is trying to help them up rather than keep them down. That accounts, in a great degree, for the respect that is shown the constables in London and for the influence they exert. Nowhere else in the world is police authority obeyed so promptly and perfectly as in London, and the criminal statistics very seldom show cases of "resisting an officer," which is so frequent an offense in this country. Nor do you often hear of a London policeman being killed or injured in the performance of his duty.

#### SELF-CONTROL COMMENDED.

The policeman is strictly enjoined by the regulations to remember at all times that he has no personal interest to serve in making

an arrest or securing a conviction of an offender. He is required to practice a self-control which would not be expected of any other occupation. He knows that he will be praised if he can settle a case out of court, and if it should ever appear that he had improperly attempted to influence the judgment of a magistrate against the prisoner he knows that he will be severely dealt with. The tone of the regulations is to encourage the use of gentleness and tact, and, no matter what scurrilous abuse may be hurled at him by a hooligan or a termagant, he is not permitted to reply.

The same consideration is enjoined upon officers in charge of police stations. No prisoner is treated as guilty; they act on the theory that sympathy and kindness will cure crime quicker than severity. The "charge room" of a London station house is, therefore, always an interesting place. While the doors are carefully guarded, and the ladies and gentlemen who, for one cause or another, have "run up against" a constable on duty, or have been "pinched" by a plain-clothes man, are not permitted too great freedom of action, they are "treated as kindly and as courteously as if they were in a Sunday-school"—as a London constable explained it to me.

It is a wise rule, also, that a reasonable time is allowed to pass after the arrest before a charge is entered or a prisoner is questioned. The officer who makes the arrest is instructed to be deliberate about his movements. He does not rush up to the sergeant's desk, make his report, and rush out again, but takes it leisurely. He saunters around until the person he has arrested is given an opportunity to cool off and gather himself together before answering the charge that is made against him. If he shows signs of excitement, and particularly if the prisoner happens to be a hysterical woman, half an hour and sometimes an hour is allowed to elapse before the offender "is brought to book" as they say. While in some cases this delay gives the prisoner an opportunity to manufacture a story or think up an excuse, in the majority of cases it acts the other way, and allows the reasoning powers and the common sense of the prisoner to assert themselves.

#### EFFECT OF REFLECTION.

Veteran officers will tell you that "a good thinking" is most efficacious before a prisoner is compelled to make an explanation or commit himself.

When a drunken man, particularly if he has the appearance of a gentleman, is brought in by a constable who cannot find out where he lives, he is invariably turned over to the station physician, and no charge is preferred against him until he has slept off the effects of the alcohol. Then, if he makes a reasonable explanation, he is permitted to depart in peace without suffering the disgrace of having his name written upon the book. The London authorities explain that this policy is more effective than any form of punishment. If a young nobleman is hauled up in a police court, or if he even gets his name upon the police register, it hardens his heart; he loses his self-respect; it makes him reckless and indifferent to shame. Whereas, if he is allowed to sober up, and is released without publicity, he congratulates himself upon "a jolly narrow squeak," and promises himself that he will never get into such a scrape again. The entire police policy of London is based upon the effectiveness of "the friendly hand."

The metropolitan police district of London extends over a fifteen mile radius from Charing Cross, and includes an area of 699.42 square miles, which is laid out like a gigantic chess board into sixty-four grand divisions and 8000 subdivisions. The organization is so perfect that the commissioner of police at

Scotland Yard may know at any moment the exact place where any patrolman could be found, and a sergeant or an inspector or a fellow patrolman knows where to look for him when they need help, advice or instruction.

There are thirty superintendents, 569 inspectors, 2480 sergeants and 16,240 constables, making a total of nearly 20,000 men, so thoroughly organized that they are an almost perfect human mechanism, the greatest of its kind that was ever known, and their personal association with the 7,000,000 people they are employed to serve is far more intimate than that of any other police force in the world. The London constable is called a "peeler" (because Sir Robert Peel, Prime Minister during the early part of the nineteenth century, organized the force), or "Bobby"—a nickname like that of "Tommy," which is given to the soldiers of the British army. He is the confidant of the joys and sorrows, the triumphs and the troubles, of every person on his beat, and is on confidential terms with the professional criminals to a degree that has never been acquired by any American officer of justice. He secures this confidence by offering a "friendly hand," and as long as a professional criminal behaves himself he knows that he will not be disturbed. Of course, he is aware that he is under surveillance, and that each constable is supposed to know where he can lay his hand on any "bad man" in his beat when that person is wanted; but the relation is a valuable one to both.

#### TRAINING OF POLICEMEN.

London policemen are appointed by competition. Any young man between twenty-one and twenty-seven years of age, who brings certificates of "sober habits," "honest character," "good temper" and "respectable connections and associates" from five householders who have known him personally for five years may apply for appointment on the force. He must "stand clear five feet nine inches without shoes or stockings," must be "free from bodily complaint, of strong constitution, good muscular development and careful as to personal cleanliness." He must also be "generally intelligent, read well, write legibly and have a fair education."

Having complied with these conditions, the applicant is sent to a school of instruction, where he settles down for a course of training in a barracks, where he receives his board and lodging free of cost, but no compensation. His life there is similar to that of a recruit in the army. He spends three or four hours a day in military drill, to smarten up his appearance, to make him stand erect, to develop his muscles, to teach him discipline and how to work with others, when help is necessary. Three or four hours a day are spent in the study of simple scientific principles to develop his mind and judgment and give him the mental as well as the muscular training necessary to qualify him for duty. Each succeeding week the course of instruction is advanced, and the candidate finally learns something of law and the penalties for its violation. After a while he is assigned to duty at a police station or a police court, where he comes in contact with the public and the criminal classes, and learns from the evidence submitted to the magistrate how a competent constable conducts himself.

The candidate is required to make reports upon imaginary cases and upon the application of ordinary laws and ordinances. For example, I have before me a circular prepared last fall by the commissioner of police and sent to the various schools of instruction; I believe there are twenty or thirty in the county of London. This circular requires candidates to prepare reports upon the laws and regulations affecting the

"Licensing of and offenses committed by peddlers and hawkers"; also "Upon the powers and duties of the police under the vagrancy act and the proper treatment of offenders thereunder." "Report as many as you can of the offenses with which a constable can deal under the highway act." "What are the powers of the police under the various acts of Parliament to prevent juvenile vagrancy and depravity?" "What would you do in case a lady is knocked down and killed by a motor car, the driver of which makes off?" "You are called at night into a house from which a thief has apparently escaped with valuable property. What steps should be taken?"

It must be understood that during the three to six months which a candidate spends in the police school of instruction many, and perhaps most, of his competitors are dropped by the way for lack of mental capacity or lack of judgment or for other reasons. I was told at Scotland Yard last fall that in 1907

only 22 per cent. of the applicants passed the ordeal successfully and were appointed to the force. Every possible thing that can be devised is applied to test their tempers, their patience, their judgment and other characteristics.

#### TEXT-BOOK FOR THE POLICE.

The text-book most carefully studied is entitled "Duty Hints for Constables and Section Sergeants." It is a compact little pocket volume of fifty pages, containing a comprehensive epitome of information upon everything that a policeman ought to know. It is arranged alphabetically, like a dictionary, and the first page contains instructions as to accidents, advertisements, aliens, animals, areas, assaults, etc. The book contains the location of every fire station, hospital, shelter for homeless, every coroner, physician, ambulance station, infirmary, etc., etc., and the last three pages are filled with "hints" to an officer on duty. He is admonished

never to lose his temper, to answer every question civilly, never to argue with any person, never to express an opinion unless he is asked; to state all facts in favor of as well as against an offender.

In this way are the policemen of London educated, and when they join the force they expect to stay with it for life. The pay is absurdly small, beginning at 30 shillings or \$7.50 a week, in round numbers, with an increase every six months until a total of 50 shillings or \$12.50 a week is reached. A sergeant's pay begins at 50 shillings and may be increased to 100 shillings or \$25 a week. An inspector's pay begins at 100 shillings and if he remains until he is sixty-two years old he may reach a maximum of \$1800 a year. Superintendents are paid \$2100 a year. But a member of the service may be retired on two-thirds pay for disability or for age when he passes sixty-two, and if he is killed or dies from the effects of injuries received on duty his widow and minor children receive pensions.

#### Extract from Editorial in the Rider and Driver introducing the article which follows, April 24, 1909.

. . . It is too bad that our country does not possess that quality of adaptability which more than anything else has worked to move Japan from an unimportant position among the nations up to very nearly the front rank, that great ability and willingness to learn from others, and then, after taking the best from each, trying to improve upon it. It is this imitative faculty that lies as the foundation stone of civilization. Without the power of mimicry we would be without language or any of the arts. It was that ability which undoubtedly enabled Japan in the late war with Russia to show how great things could be accomplished through careful organization. When we learn that our cities can be governed satisfactorily only by methods similar to those employed by business concerns, and that we must eliminate "politics," absolutely, if the public interest is to be conserved, we shall do ourselves justice and get the worth of our money. It would be as logical to select a cook because she is a Methodist, or a Roman Catholic, as it would be to select a public city officer because he is a Republican or a Democrat. A cook should be chosen because of her ability to cook and a municipal public official because he is fitted to conduct his office as a business man is supposed to conduct his business, with economy and efficiency.

#### Our Police Department and the Fallacy of Trying to Conduct it Under Present Methods.

The present method of conducting the Police Department through a Police Commissioner appointed by the Mayor cannot help being a failure both theoretically and practically. Each new Mayor appoints his own Police Commissioner, and he in turn selects his deputies. The Police Commissioner is changed at the Mayor's option.

Police business is complicated and cannot be learned in a hurry. If a Police Commissioner were appointed to serve during efficient service and he were willing to remain and make it his life work it would be different, but the Commissioner under the present system goes out with the Mayor even if he is retained that long, and the conse-

quence is that we always have at the head of the department a man who at first knows nothing of the business, and is superseded by another when he just begins to be competent to do his work efficiently.

The deputy commissioners are open to the same criticism. One might as well or even better expect to conduct profitably, in the same way, a railroad or any private business that required special knowledge, for if the president of a railroad were discharged it would be comparatively easy to get another railroad man to take his place, and so with the head of a department store or a factory, but in police work we cannot get a man who is competent unless he has had actual police experience extending over a number of years.

Every change of the head of any business is necessarily attended with loss of efficiency for a time. Each new man comes in with at least slightly and usually radically different ideas and theories from those held by his predecessor, and overthrows much of the work that has been done before him.

Besides this, the members of the Police Department resent having a man put over them to tell them how to do the work which they know he knows nothing about. This is bad for the discipline of the force and makes the lot of the Commissioner and his deputies extremely unenviable and their work unremunerative in results.

In order that we should have a force improving in efficiency from year to year we must have a settled policy and a permanent head, or pay more for indifferent service than we should for the best.

There appear to be two ways to remedy this: Either to appoint a Commissioner from outside the police force and retain him as long as he will stay during efficient service, or to appoint a Chief of Police from the force itself.

If a Commissioner be appointed he should be a man of excellent executive ability and of open mind, so that he can take advantage of the knowledge to be gained by study of what is being done elsewhere in the line of his work, for if he is unapproachable and incapable of assimilating the experience of others he will prove too small for so important a position, and there is no position more

important to a great city than the head of the Police Department.

The plan that appears most rational, however, and most sure to give good results is to appoint a Chief of Police from the force itself; a man with unblemished record who has been in the service long enough to have reached the rank of lieutenant should be eligible. Seniority in service should not count, and a comparatively young man would be better than an old one.

The Chief should be held absolutely responsible for everything and not be interfered with in the discharge of his duty unless it becomes absolutely necessary.

In place of the Police Commissioner and his deputies there should be a Police Commission of five men, one to serve one, one two, one three, one four and one five years. At the end of each year the five members of the Commission should elect a new member to serve five years to succeed the retiring member, but could re-elect the retiring member to succeed himself if they so desire.

The election of a new member or re-election of a retiring member should be subject to the ratification of the Mayor and also of the Governor, if that is, or can be made, legal through the Charter. The Commissioners should be chosen for their business ability, and should be men of high standing and disassociated with local politics.

The actual executive police work should be performed by the Chief of Police, and the entire time of the members of the Police Commission would not be required for duties connected with the Department, but it should be understood and agreed to by each member of the Commission when he accepts his appointment that he will devote all the time necessary to obtain the best results.

This Commission should hold frequent meetings. Its duties should be advisory to a large extent, but it should have absolute power to discharge the Chief of Police for cause or to interpose, and direct him, should it in their opinion seem advisable.

By this method there would always be a Commission consisting of men all of whom have had at least one year's experience. The public would hold them responsible through the Mayor, who would have power of removal for cause. The Commission would hold the Chief responsible, and he would hold each of his assistants responsible for those under him, and have power of removal for cause. In this way it would be simple to locate responsibility and thus insure economical and efficient service, and a great gain over the unbusinesslike method now employed, the like of which would bring about the absolute ruin of any business.

I do not wish to be understood as criticising the present Commissioner, General Bingham, or General Greene, or any of the other excellent men who preceded them, for their efforts have not been sufficiently appreciated.

They have worked against almost insurmountable difficulties, with no practical knowledge at the start; with a force too small for the duties required, and a large proportion of that force hostile to them, which after all is

human nature; with many of the men who would have been loyal and honest public servants, had they been trained in a proper school, spoiled by the rotten politics of our unfortunate city, which have put a premium on dishonesty, disloyalty and graft, and with sometimes indifferent support from the Mayor who has appointed them.

They have had the interference of political bosses and ward politicians, who have often succeeded in reinstating officers who have been degraded or discharged for cause.

They have contended with the lack of power of summons and complaint as employed with great advantage elsewhere, making it now necessary to arrest where often a summons would accomplish the same results with less expense and without the consequent red tape and hardships attending arrest, such as loss of time and money to the innocent.

They have had difficulty in getting money for proper equipment and for such printed matter as is used elsewhere and which would result in great saving to the service; and at last when they have begun to know something about the work and gained the confidence of their subordinates, if they have been so fortunate, they are fired out at the expiration of the Mayor's term if they have had the backbone to stand the racket that long.

And then a new Mayor is elected and another unfortunate is appointed, who if he is good for anything would have earned more money and gotten more satisfaction in almost any other occupation. The public is the loser, for with such inane tactics it can never enjoy the benefits of a police department as efficient as could be secured at much less cost by rational methods. That the force is too small for the work to be done is quite true, but, small as it is, it can do more work and do it more intelligently and more efficiently by adapting to our needs the experience of foreign cities.

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#### **“Usefulness of the Horse in Regulating Traffic.”**

[Speech of S. W. Taylor, at the annual dinner of the Traffic Squad, New York Police Department, Waldorf-Astoria, May 8, 1909.]

MR. CHAIRMAN AND MEMBERS OF THE TRAFFIC SQUAD:

While thanking you most gratefully for the honor and the privilege of thus responding to a toast the subject of which is so near and dear to my heart, and with which I have labored, as it were, in the same harness and under the same saddle these many years, I fear that you have imposed an impossible task. It is not only beyond me, but far from the ken of man, to comprehend the complete usefulness of the horse in this calling to which you have assigned him, or in any other field of work in which he may be employed. His wonderful adaptability to multifarious conditions and his quick response to direction of the human mind bring him almost within the boundless realm of reason.

As I have been permitted to observe the animal on

the streets of New York, there are various phases of his applied usefulness which, although with trepidation, I might venture to measure in connection with the regulation of traffic. These may be classed as the commercial phase, the humane phase, the moral phase and the æsthetic phase.

As Kipling says:

“Four things greater than all things are  
Women and Horses and Power and War.”

While not a parody upon Luther's immortal tribute to “Wine, Women and Song,” this may be accounted a broader, if thereby vainer, attempt at weighing the greatest things of life by including in the scales the noble horse. These poets appear to be of the same thought, because they both are not only gallant enough and wise enough to include women in their apostrophe, but also because a verisimilitude of sentiment may be found between the wine and song of the one and the power and war of the other; for, notwithstanding that Robert G. Ingersoll, while characterizing whiskey as a conflagration, lauded wine as a fireside, wine makes us believe we are powerful, and the song of some who sing would drive men to war in the hope of escape by death.

It would require, I believe, a myriad of expert accountants and a veritable milky-way of adding machines to compute the value of the horse to commerce in regulating traffic. As Mr. Eno tells you, prior to 1900, two years before which he came to me with an article on the subject for publication in *The Rider and Driver*, commerce was stalled every day by blockades in traffic due to the absence of regulation. I myself knew nothing about the matter, and it was not until he had induced the administration of General Greene, through Deputy Commissioner Piper, to place six mounted men on Fifth Avenue that any one began to realize that these were but the heralds of the magnificent army which you now comprise, and which has become so necessary to the efficient conduct of business in this wonderfully progressive metropolis. How much money, of which time is the equivalent, has been saved to commerce by the horsemen on traffic duty, he by his mobility being equal to, at least, ten men on foot, cannot be estimated, save as by comparison with the ticking of the clock, which, if the clock be kept going, indicates movement toward infinity and which, when stopped, like the stopping of the human heart, means loss irreparable.

To obtain the humane point of view of the horse's usefulness in regulating traffic, let us hearken to the clatter of his hoofs as, spurred on by his fearless rider, he dashes to the bridle of a runaway and saves the lives of those the affrighted creature imperils; as he gallops ahead of fire engines and trucks that they may speed on to the rescue of the flame-imprisoned; as he dashes across the avenue to clear the way for the ambulance on its errand of mercy; as he stops short and stands still after a plunge into the thick of traffic for his loving master to stoop down and lift from the pavement to the pommel of his

saddle a toddling child that has wandered from its nurse.

These are but sounds on the drum of the ear, sounds that beat a tattoo and a rattle, to set us thinking of the maze of ways in which the usefulness of the horse in regulating traffic is a saver of life as well as boon to commerce.

From the pinnacle of moral elevation wrought by the horse in regulating traffic behold a transformation! Truckmen cursing, swearing and fighting; cabmen fighting, swearing and cursing; pedestrians adding to the din of objurgation—these were the former conditions! Now, the sight from afar of the mounted traffic man keeps all in line of order, and the tangle of trucks and cabs and other vehicles is no longer common and the mouths of men from foulness to pleasant salutations have changed.

Æsthetically considered, the horse in regulating traffic has added a bright charm to the sombre pictures of our daily street life. What more beautiful than the sleek-limbed symmetrical creatures that Major Benton has so carefully and skillfully selected, all of a color, the color of bay, which comes through the French from the Latin *Badius*, meaning the reddish brown of the chestnut!

In answer to the question, “What more beautiful?” I would say—and the ladies in the galleries here, as well as those who admire them from their carriages, their automobiles, the windows of their homes and from the sidewalks, I am sure, will approve my words—nothing could be more beautiful to the eye of man as well as to that of the gentler sex than the centaur-like combination of horse and rider, typified by the mounted men of the Traffic Squad.

Aye, indeed, it is beyond me or any man to gauge the usefulness of the horse in regulating traffic! Standing still in the middle of the thronged street he is an isle of safety to the pedestrian crossing; at speed, he is a messenger of mercy or retribution. His very presence is an ægis of protection to the innocent and a menace of punishment to the wicked. The mob moves before his flight as the field of ripened grain sways back from the path of the wind.

Illimitable is the word that I might employ in expressing the usefulness of the horse in regulating traffic; illimitable now and has he always been, back to the days when Bucephalus carried Alexander and when a horse bore the weight of Cæsar and Napoleon, who, each in his turn, were the great traffic regulators of the world; back to the days of Hannibal when he crossed the frozen Alps on his charger, and with his cohorts of Carthaginian horsemen marched into Italy and to the gate which marked the beginning of the Appian way; back to those epochs of regulating traffic, I say, without which there would to-day be a different map of nations and another form of civilization.

I deem it not hyperbole when I declare that the usefulness of the horse in regulating traffic—whether in our small way, which, compared to the ways of history, wherein he has blazed the paths and trails of civilization, is like

the trickling stream to the rush of the torrent—can be bounded only on the north by the north star, on the south by the southern cross, on the east by the ever-rising sun, and on the west by the sun that never sets.

### **Street Traffic Regulation Past, Present and Future.**

*Extract from Report of Traffic Squad Dinner.*

[Speech by W. P. Eno, Esq., author of the "Rules of the Road" and "Street Traffic Regulations," now in force in New York and copied by other cities, at the annual dinner of the Traffic Squad, New York Police Department, Waldorf-Astoria, May 8, 1909.]

Regulation of street traffic was unknown in New York up to the year 1900. Although traffic was much less than now blockades were frequent throughout the city. Often the greater part of a day was consumed in transporting merchandise from point to point, especially in the downtown shipping districts. Charges were proportionate to time consumed. The police, without systematic direction or any traffic rules, were powerless. Quarrels between policemen, truckmen and cabmen were common, and it was only by resort to the "night stick" that in many instances blockades could be cleared away.

There was no Bureau of Street Traffic, no Traffic Squad and not one officer employed on street traffic duty. "It may well be doubted now whether the business of New York could get on without the Traffic Squad. It is vital to the life of a great city that its life blood—namely, traffic—should circulate."

The Traffic Squad proper on January 1, 1909, consisted of 680 men. To these should be added the detail of thirty-two men to the License Squad, really traffic duty, and of thirty-one from the Bridge Squad for traffic duty at theatres, making in all 743 men or about 7½ per cent. of the whole police force. All policemen should attend to traffic duty when emergency or necessity requires, so that really a much greater part than 7½ per cent. of the police work is devoted to Street Traffic Regulation, which has now become of more importance than any other one thing that the police have to do with.

Much has been done, but experience has opened up new possibilities for the Bureau of Street Traffic. The most pressing of the objects remaining to be accomplished are:

First.—Educating the drivers and pedestrians to a fuller understanding of the traffic regulations by continued use of the folders and posters. Every driver who knows the regulations will resent infraction of them by others, and thus himself become a strong factor in their enforcement. Education of the drivers is the keynote of traffic regulation.

Second.—Perfecting the office work of the Bureau of Street Traffic, so that complete records can be kept of drivers of licensed and numbered vehicles; of accidents, breaches of regulations, speed laws, driving without license and cruelty to horses.

Third.—Transferring the License Bureau to the Bu-

reau of Street Traffic, with power to examine and license drivers, to issue numbers for vehicles, to examine and seal taximeters and to establish regulations and standards for all public vehicles, as is done in London.

Fourth.—Improving and revising plans at specially congested points, and at the operas, theatres and private entertainments.

Fifth.—Improving the management of parades and so arranging them and directing their routes and times as to avoid unnecessary interference with other interests, and allowing traffic to cross them at short intervals of time. Parades, now that it has become so exceedingly necessary not to impede business, should usually be relegated to streets where there is comparatively little traffic.

Sixth.—Giving the Bureau of Street Traffic sufficient authority over the Street Cleaning Department to direct what streets and what parts of streets shall be first cleared of snow so as to hinder traffic least. That most neglected necessity of sanding the pavements should be made a part of the duties of the Bureau of Street Traffic, or of the Department of Street Cleaning under its direction.

Seventh.—Empowering it to control the watering of streets, especially those paved with asphalt, which should never be sprinkled, but be regularly flushed at night by the Department of Street Cleaning. The Society of Prevention of Cruelty to Animals and some of the civic clubs have attempted to obtain an ordinance forbidding the sprinkling of asphalt, but perhaps some of the Aldermen are directly or indirectly interested in sprinkling jobs. At any rate, no ordinance has yet been passed, and it is not worth while to wait for it, as there is a very simple method available. Sprinkling is done by contract with the occupants of buildings, most of whom do not realize what harm they are encouraging by agreeing to pay for it. If they were informed of this through the press or by circular, and that there was no obligation on their part, probably most of those who now sign would refuse to do so next time and the sprinkling would cease, because it would not pay to do it. After this is done it will be easier to get an ordinance passed, as there will be but little influence brought to bear against it.

Eighth.—Giving to the Police Department through the City Charter power of summons and complaint sufficient for the summoning of an offender of any of the traffic regulations, including speed violations and accidents where no serious bodily harm has been done. This legislation is extremely important. It is no experiment, for it is in practice in London, Paris and Boston. It is the simplest and easiest way, as it answers as well as an arrest without the accompanying hardships and waste of time, and it does not take the officer from his other duties. The drivers now often break the regulations, as they know the officer is needed on his post.

The elemental stages of the work are passed now and New York can shortly have, if these suggestions are followed, as perfect street traffic management as exists anywhere in the world.

It is very important to have a capable man in active control of traffic who has no other duties. His tenure of office should be continued during efficient service. No one can do this work properly until he has spent months and probably years at it. I believe we have the right man now and that he should be retained. Some one must give this matter his constant attention and study, or it will continue in an unsatisfactory state of development. The problems of street traffic management are complicated and often new and increasing all the time in number, dif-

faculty and importance. They need not only the best ability, but the necessary time to study in order to solve them in the simplest and best way.

I am pretty well acquainted with many of you men on the Traffic Squad, and I doubt if there is a finer lot in any army in the world. Very little of the bad that has been said of our police officers can apply to you, and if the *esprit de corps* that obtains now continues it cannot help but prove an inspiration for a better standard for the police force at large.

## NEW YORK OWES MUCH TO TRAFFIC GUARDIANS

Mounted Policemen Save Merchants Huge Amount of Time and Money.

SIMPLE RULES FOLLOWED.

William E. Curtis Writes of Work That Has Been Done by Mounted Squad.

BY WILLIAM E. CURTIS.

[SPECIAL CORRESPONDENCE OF THE WASHINGTON EVENING STAR AND THE CHICAGO RECORD-HERALD.]

NEW YORK, June 12, 1909.—At West Point Military Academy the other day I heard many compliments for the mounted police—"the traffic squad," as it is called, of New York—and Major John M. Carson, Jr., who had just returned from that city, was enthusiastic in his admiration both for the men and the horses. "They are a fine body of men," he said, "beautifully mounted upon well trained horses, and they carry themselves with dignity, coolness and discretion, under the most trying circumstances."

The traffic squad of New York are the horsemen in uniform whom you see in the midst of the great stream of vehicles upon crowded thoroughfares like Fifth Avenue, Broadway and along the most frequented cross streets. Strangers do not often visit the streets which run along the dock, but the mounted police can be found there also, keeping the processions of drays and trucks in motion and on their own side of the road.

The regulation of street traffic was unknown in New York up to the year 1900, and although the number of carriages, automobiles, delivery wagons, trucks and other vehicles was much smaller than it is to-day blockades were frequent throughout the city. Often the greater part of a day was consumed in transporting merchandise from one point to another, especially in the downtown shopping districts, while charges were proportionate to the time consumed. Quarrels between police, truckmen and cabmen were common, and it was only by resort to the "night stick" that in many instances blockades could be cleared away. There was no bureau of street traffic, no traffic squad and not one officer employed on the street to keep vehicles moving.

These conditions provoked much complaint and criticism in private and in public, but

nothing was done to correct them until William Phelps Eno, a public-spirited citizen who spends his winters in Washington, undertook to secure a change. He asserted that to accomplish anything worth while three things were necessary:

1. We must have concise, simple and just rules, easily understood, obeyed and enforced under legal enactment.

2. These rules must be so placed and circulated that there can be no excuse for not knowing them.

3. The police must be empowered and ordered to enforce them, and men should be trained for that purpose.

After giving a close study to conditions in London, Paris and other great cities, Mr. Eno endeavored, and with great success, to secure the regulation of traffic in the streets of New York by means of a traffic squad, which on January 1, 1909, consisted of 743 men, including 32 men from the regular force detailed to the license bureau—really traffic duty—and 31 men from the bridge squad for duty at theatres at night. Of these 138 are mounted, eighteen have bicycles and the remainder are on foot.

These officers enforce the street traffic regulations prepared by Mr. Eno, which are printed in folder form for distribution among teamsters, coachmen and the public generally, and in poster form to put up in public stables and garages.

They consist of nothing which anyone who knows how to drive, or has proper consideration for the safety and comfort of others as well as his own, would not observe anyway. They are made as concise as possible, so as to be understood by all classes of drivers, and are illustrated by diagrams showing the proper methods of turning corners and crossing from one side of the street to the other.

When I asked Mr. Eno why he undertook this movement, he said: "Because I saw the useless loss of life, money and time due to the lack of proper regulations and their enforcement."

"How was it received by the public in general and by the teaming interests in particular?"

"By the former, including the cab drivers, with immediate enthusiasm, but by the latter with distrust at first. Within the past few months the Merchants' Association, the Truck Owners' Association, the State Fair Association and the Wallabout Market Association have presented the traffic squad with flags in appreciation of the help they have received from it. The drivers now regard the members of the squad as their best friends in enabling them to do their duty comfortably."

"Is there any difficulty in enforcing the regulations?"

"There was at first, but it is steadily diminishing, for as the drivers become familiar with the regulations they resent infraction by others and become regulators of street traffic themselves."

"The important intersections are managed by the block system copied from London, which allows traffic to go through alternately. The signals are given by whistle, but could be given by semaphore and eliminate the noise. The vehicles at the opera,

theater and other large gatherings are handled by the use of diagrams. Congested places caused by more than two street crossings at the same place, and points where streets converge, such as Columbus Circle, by means of posts and ropes. All of these plans can be very much improved. Larger ropes should be used and the ropes and posts, some of which should be lighted, left up all the time. These temporary plans should not, however, be continued longer than necessary to find out just where the trouble lies, and then the curb lines and car tracks should be changed where necessary to control, as far as possible, the mistakes of their original layout."

"Fifth Avenue is now being widened from 40 to 55 feet, but it is a mistake to widen it to more than 47 feet, which is enough for six lines of vehicles. There should not be room for any more lines in any roadway where traffic is heavy, unless there are isles of safety, which the Fire Department seriously objects to on Fifth Avenue. If the cross-town car lines in the wide streets were put under ground it would leave room in their middle for cab stands at convenient distances apart and eliminate the 'wandering Jehu' who now has no place to stop."

"When was the present system adopted?"

"The block system was put in operation and three mounted men put on Fifth Avenue in 1902. On December 7, 1903, their number was increased to six. In February, 1903, an ordinance on traffic regulation was introduced, but held up and apparently shelved. The City Charter, Sanitary and Penal Codes, however, were discovered to contain sufficient authority for the Police Department to regulate traffic without the help of the Board of Aldermen. The most important provisions of my proposed ordinance were then embodied in folder form and taken to the Police Commissioner, who, when shown his legal authorities, signed it and had it issued October 30, 1903. Permission was obtained to put 100 signs directing that 'slow-moving vehicles keep near the right-hand curb.' These will shortly be superseded by others with improved wording. A change in police administration resulted soon in a larger increase of men for traffic duty, but also in an unfortunate discontinuance of the printed traffic regulations, the only means of educating drivers, the keynote of traffic regulation, without which nothing can be accomplished speedily or economically."

"The saving of money in time to the citizens would undoubtedly pay the entire expense of several police departments as large as the present one. The saving of life cannot be accurately computed, but probably several hundred lives are saved every year, while the addition to comfort and pleasure is not to be lost sight of. It is extremely important that the Police Department in every city be given the power of summons and complaint, as is done in London, Paris and Boston, which usually answers better than an arrest without accompanying hardships and delays, and does not take the officer from his post, on which assumption the drivers now often presume to break the regulations."

"Are there any other ways that traffic regulations can be improved?"

"Most decidedly! By perfecting the office work of the bureau so that complete records can be kept of licensed and numbered vehicles, of accidents, breaches of regulations, speed laws, driving without licenses and cruelty to horses. Other things of minor importance are transferring the license bureau to the bureau of street traffic, improving the management of parades, giving the bureau authority over the Street Cleaning Department to direct what streets and parts of streets shall be first cleared of snow, empowering it to control the watering and the sanding of streets, and many other things of a technical nature.

\* \* \*

"Streets paved with asphalt should never be sprinkled, but be regularly flushed at night by the Department of Street Cleaning. The Society for the Prevention of Cruelty to Animals and some of the civic clubs have attempted to obtain an ordinance in New York forbidding the sprinkling of asphalt, but, perhaps, some of the aldermen are directly or indirectly interested in sprinkling jobs. At any rate no ordinance has yet been passed, and it is not worth while to wait for it, as there is a very simple method available. Sprinkling is done by contract with the occupants of buildings, most of whom do not realize what harm they are encouraging by agreeing to pay for it. If they were informed of this through the press or by circular, and that there is no obligation on their part, probably most of those who now sign would refuse to do so next time, and the sprinkling would cease, because it would not pay to do it. After this is done it will be easier to get an ordinance passed, as there will be little influence brought to bear against it."

\* \* \*

"Has traffic regulation been tried in other cities?"

"Lexington and Louisville, Ky., have taken it up in the most sensible way, having adopted the New York regulations practically verbatim, with a few slight changes required

for local conditions. Boston issued a pamphlet on January 1, 1909, of street traffic regulations, containing practically all of the New York sections, and in addition a number of new and rather complicated ones, some of which have already been modified, and eventually may have to be discarded. Baltimore, instead of adopting the present New York regulations, took as a basis the long since discarded regulations contained in the New York City ordinance. It is quite as important to know what to leave out as to know what to put in, and new regulations adopted by those who have not had much practical experience are dangerous. Those in New York have been the result of long study and observation. Each new clause has been mulled over before being recommended and introduced. Everything that has been adopted is necessary, and brevity and simplicity have been sought. It is of the greatest importance that the regulations for all cities should be practically identical, differing only as local conditions require."

"How is traffic handled in foreign cities?"

"In London the work on the streets by the officers is no better than it now is in New York, but the office work is developed to perfection and the drivers know their duties more generally. In Paris the officers know their duties, but the drivers have no rules to go by, and when the police are absent everything is confusion. A small amount of money spent in distributing the traffic regulations in Paris would enable the officers to do more effective work and probably reduce accidents and delays more than 50 per cent.

\* \* \*

"The elemental stages of the work are now passed, and if these suggestions are followed New York can shortly have as perfect street traffic management as exists anywhere in the world. It is very important to have in active control of traffic a capable man who has no other duties. His tenure of office should be continued during efficient service. No one can do this work properly until he has spent months and probably

years at it. I believe New York has the right man now and that he should be retained. Some one must give this matter his constant attention and study or it will continue in an unsatisfactory state of development. The problems of street traffic management in every city are complicated and are increasing all the time in numbers, difficulty and importance. Every city needs not only a man in charge of the best ability, but he must have the necessary time to study these problems in order to solve them in the simplest way. I am pretty well acquainted with many of the traffic squad, and I doubt if there is a finer lot of men in any army in the world. Very little of the bad that has been said of our police officers can apply to them, and if the *esprit de corps* that obtains now continues it cannot help but prove an inspiration for a better standard for the police force at large, not only in New York, but in all progressive cities."

\* \* \*

"What are the qualifications necessary for a good traffic policeman?"

"A good physique, ability and willingness to do a hard day's work, unflinching courtesy, courage, firmness, fairness, intelligence and common sense, and, for horsemen, the additional ability to ride well. The men on foot must be 5 feet 10 in stature, but this does not apply to men on horses, for which purpose they should not be too heavy."

"Where does the New York police force get its horses?"

"It advertises for bids in the *City Record*. The horses must be bay with black points and little or no white, and practically sound. They must be fifteen and one-half hands or over and are taken on trial for thirty days and sent to the training farm. If they are not suitable, especially as regards intelligence, they are returned. Their present cost is \$310 per head. In the last year or two they have been generally selected by Major C. A. Benton, U. S. A., retired, who has acted as General Bingham's special representative and given his time free of charge for this purpose."

WILLIAM E. CURTIS.

### The Necessity of Uniform Traffic Regulations.

[On June 14, 1909, the International Association of Chiefs of Police of the United States and Canada held their annual meeting at Buffalo, N. Y. The president of the association, Major Richard Sylvester, who is also head of the Police Department of Washington, D. C., said among other things:

"In line with the proposition for similarity of laws, it is pleasing to note what has been and is being done by Wm. P. Eno, of New York, a student of traffic regulations, and that gentleman's ideas for general adoption will be called to your further attention. This whole subject is one that should be given a full discussion by your membership."

By "further attention" Major Sylvester refers to an article which I wrote at his request for publication in the annual report of the International Association of Chiefs of Police of the United States and Canada, to come out the latter part of August, and which I now publish here with his approval and consent]:

As cities are gradually taking up the regulation of street traffic, perhaps to some degree influenced by the growing success we have attained in New York, it is most important that the regulations throughout the country should be uniform, only such slight changes being made as are absolutely necessary to meet local conditions. These changes should consist principally in the elimination of a few things that are necessary where traffic is dense

as it is in New York and other very large cities, but which may not be needed in smaller or better planned ones.

I recommend as the first step that folders of traffic regulations be freely distributed among the drivers, and that regulations printed on heavy cardboard be put up in all public stables and garages, and also on iron or bronze standards at cab stands and other prominent places. This alone will soon familiarize drivers with the regulations, which is the most important step of all, and will cost but very little. The price of 100,000 folders is about \$200, and of 1,000 cardboard posters about \$15. For New York all the laws bearing upon the folder have been looked up and tabulated for use with it. In all cities it will be found that there are laws which in the majority of cases can be made to apply, and these should be looked up and tabulated, as I have done for New York. I would not, however, advise delay for any new laws to be passed. When there are no laws that specifically apply, their lack may or may not ever be felt. All the regulations in the folder are founded on common sense, and are for the public benefit. Laws, when needed, can be passed. It is better to have too few laws than to have bad or complicated ones, as, for example, the plan which I first tried, of getting proper ordinances passed by the Board of Aldermen of New York was a mistake and a waste of time.

The use of the folder will soon get the majority of the drivers strongly in favor of the traffic regulations, and public opinion will back up whatever is needed, if any-

thing, in the way of legislation. The best legislation that can be passed is that which gives the police all necessary powers to regulate street traffic, such as Sec. 1 of Art. VII of the Ordinances, and Sec. 315 of the New York City Charter. Laws to fit each case then are not necessary. If the Police Department is empowered and directed by law to regulate traffic, it must adopt such regulations and take such steps as are necessary to enable it to fulfill its duties.

The second step I recommend is that a complete but very simple record, easily referred to, be kept of all accidents, complaints, arrests and reprimands.

I enclose you one of the cards we have for complaint and arrest in New York. (See p. 13 of this book.) Whenever complaint or arrest is made it is filed for record. It is the only card we have in New York, though we sadly need a complete set, such as are used abroad. For smaller cities this one alone will answer fairly well.

All other steps necessary for perfect street traffic regulation will follow in due course, but if only the two steps I here recommend be intelligently put into practice most of the trouble will be over.

*Above all, it is to be remembered that the drivers themselves are the best regulators of street traffic when they know the regulations and what their rights are.*

Many cities, induced by the success in New York, have lately adopted traffic regulations. There has been a good deal of difference, however, in the way they have proceeded, and I give here a few examples:

Lexington and Louisville, Ky., have gone about it in the most sensible way of all. They have adopted the New York regulations practically verbatim, making a few slight changes where local conditions seem to require them, and leaving new things to be added until they have tested what was already in use, and until they had had a chance to have some practical experience before trying them.

Boston appointed a commission which came to New York and spent two days, afterward visiting other cities, in which they reported they found nothing that would be of much use to them. On January 1, 1909, they issued a pamphlet of street traffic regulations and rules of driving. This contained practically all of the New York sections, not so well arranged as to order, however, and they introduced a number of new and rather complicated regulations, some of which have already been modified and eventually may have to be discarded. It is quite as important to know what to leave out as it is to know what to put in, and new regulations adopted by those who have not had much practical experience are rather dangerous. The New York regulations have been the result of long study and observation. Each new clause has been mulled over for a long time before being recommended and introduced, and it is believed that everything that has been adopted is necessary. Brevity and simplicity have been sought, and the regulations are contained in a small folder, which is undoubtedly a better form for distribution and for the pocket than a pamphlet or a single sheet.

Baltimore, instead of adopting the New York traffic

regulations, took the long-since discarded regulations contained in the New York City ordinances as a basis and introduced some new clauses of its own, some of which are impossible to carry out.

It is of the greatest importance that all cities should have practically identical traffic regulations, containing only such slight differences as are made necessary by local conditions, and these are very few indeed. The fact that automobiles go from city to city and from town to town so frequently makes this additionally desirable.

I have tried to reach cities that are contemplating traffic regulations by letter and sending what information seemed necessary, but this is an unsatisfactory method, and I trust that my book may prove a more effective one. Unfortunately, every one seems to think that he knows all about traffic regulation. It is, however, not a simple subject, though it evidently seems so to the uninitiated. Far better would it be if the persons to whom the formulation of traffic regulation is entrusted were willing to take the results of experience as a basis to start with, and when they have acquired a knowledge themselves through experience, it would be ample time to try to inaugurate improvements.

It is the Police Department that will have to enforce traffic regulation when introduced, and it is far better that it should adopt the regulations which it has got to enforce than to have it done by any one else, and thus avoid a division of authority.

I embody here the New York regulations of February 8, 1909 (see pp. 4 and 5 of this book), adapted as I believe they should be for Washington or other similar cities. Some of the provisions left in will doubtless seem unnecessary to those who have not had actual practical experience with their working.

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#### **Traffic Men on Foot and on Bicycles.**

There are just a few words to be said about these men in order that there may be no mistake in the mind of the public in regard to their importance. The mounted men have come in for a large share of praise, more in proportion to their number than the rest of the squad, though no more than they deserve for their splendid work, and the men on foot and on bicycles do not begrudge them all they get. The combination of man and horse has been the ideal since the world began and it always will receive praise and admiration, and especially now that machines have so largely supplanted the horse is it refreshing to find that we have to revert to man's best friend. There are certain functions which no man on a machine or on foot can perform satisfactorily, but there are other duties where the horse would be useless and where a bicycle is far superior, and still more where a man on foot is better than a man on either a horse or on a bicycle. Equal credit should be given to an officer for duty well done whether on a horse or a bicycle or on foot. There is no traffic duty more important or that requires harder and more faithful work and more incessant vigilance than that done by the men on foot.



NEW YORK POLICE DEPARTMENT FLAG



PRESENTED BY DEPUTY COMMISSIONER F.H. BUGHER



PRESENTED BY MERCHANTS ASSOCIATION MAY 6<sup>th</sup> 1905





# Part IV

## Extracts from a Pamphlet on **How to Improve City Car Service**

Published May 26, 1907

### Preface

This pamphlet was begun as a magazine article. It expanded to such an extent that I decided to publish it in pamphlet form. It is really part of a book on Street Traffic Regulation and Municipal Transportation which has been in course of preparation for a long time and is to be issued shortly. The new Public Service Commission Law, commonly known as the "Utilities Bill," just passed in the State of New York, makes it desirable that every one should know what can be done and how it can be done to get better transportation service. Many of us accept things as necessary evils which can easily be remedied. If this pamphlet sets people to thinking for themselves on this subject, it will have started a movement the results of which, while making no unreasonable demands on the transportation companies, will free us from long endured and usually unnecessary hardships.

WILLIAM PHELPS ENO.

New York, May 26th, 1907.

The main subject matter will be found in large type and complete in itself. The notes are in smaller type and give legal references and further particulars.

# **Efficient Service—Increased Seating Capacity—Construction and Plan of Cars—Guards on Surface Cars—Car Tickets—Bells—Heating—Ventilation—Speed—Noise—Stopping Places.**

## **CHAPTER I.**

### **Duties of City Car Companies to the Public and How the Companies May Be Forced to Live Up to Them.**

There should be no patience with the demand frequently made by ward politicians or other professional servants of the people for a reduction of car fares from 5 cents to 3 cents. They are not so strenuous to do something for the benefit of their constituents as they are to pose as their champions and so obtain benefits for themselves. There are enough other things and to spare, in relation to the car companies, that need reform and which public attention and law can rectify. Justice above all things in all business transactions should be the invariable rule. Car lines were built with two objects. First to render a public service, and second to pay dividends to the stockholders. For the franchises granted, the companies agree to furnish efficient service to the public, and they should be held strictly to the letter and to the spirit of their agreement; but the fare which they expected to get when the agreement was made should not be reduced unless it was contemplated in the agreement. It is no excuse to argue that the franchise turned out to be more valuable than was thought it would be, even though it were obtained by bribery or any other dishonest method. The bargain once made should be scrupulously kept by both parties. The stockholders subscribed their money, based on the agreement between the local government and the company which obtained the franchise, and in the majority of cases they knew nothing beyond the agreement. It is manifestly unfair, therefore, that the stockholders should be made to suffer by having the agreement changed to what afterthought has shown the public it should have been. The lesson learned should beget care in the future, for too often have valuable franchises been given for nothing. It is proper, in starting out to improve present conditions, to recognize that an agreement has been made and that we must in all honesty abide by it, or if we change it, give fair compensation for the changes desired. Anything else but this is robbery, as it is just as much robbery for the public to take away from a company that which belongs to it as for one individual to steal from another. It is not as though the two parties at issue were the public on one side and the parties who got the franchise by fraud or other dishonest means on the other. These parties have often gotten out and innocent people taken their place, relying on the good faith of the government, which granted the charter, to live up to its agreement. Because the government has been duped it has no right to make others suffer for its stupidity. If the government can bring to justice those

who have duped it, it is its bounden duty to do so, and sometimes the lesson is worth the cost.

Having then tried to make it clear that there should be no disposition on the part of the public to ask anything but what it has a right to ask, we will take up the different things which can be improved.

#### **Question of Seats.**

The method of allowing only the number of passengers that there are seats for, as in Europe, won't answer. It is not worth while arguing about it. Those who have tried it know its many disadvantages; we have not room to discuss them here.

We will assume that the agreement entered into, in return for the franchise granted, contains some provisions for good and efficient service. It certainly is not good and efficient service if people are made to stand when it is possible by reasonable foresight, based on usual conditions, to furnish sufficient seats.

In New York, for instance, the seating capacity is limited by the number of cars that can be run safely within a given time. There must be some space between the cars and experiment will show how short it is safe and practical to make it. It would be unreasonable and unwise to ask for more cars than can be run with practical safety, and in the case of surface cars without interfering too much with other vehicular traffic, for there must be enough space between the cars for other vehicles to cross. The number of cars to be run should not be left altogether to the car companies, their interest being to run as few as possible and let people stand. This matter should be decided by the Public Service Commissioners if any complaints are made. If the matter is not speedily remedied after a just complaint it is pretty sure that either the Commissioners are neglectful of their duties or are in collusion with the car company. The Commissioners are responsible (See Note 1) and and it is up to them to show why they have not attended to their duties. It is better, in making complaints, to go right away to headquarters. There is no use in complaining to the car companies, whose interest is at variance with ours. We want good service and they want to give us as poor service as we will tolerate. It is more profitable to carry passengers crowded into and hanging on to a car than properly seated.

At crowded times morning and evening there is an excuse for making people stand, but only when all the cars are run that is possible, having in view a sufficient

interval between them. At no other times and for no other reasons is there any excuse whatsoever, and the car companies should be obliged by the Commissioners to run enough cars to seat more people than the probabilities call for. The principle of running just as few cars as they dare, by the companies in smaller cities, where there is ample room on the tracks for many times more cars than can possibly be needed, is without any excuse whatsoever, and should be promptly dealt with by the Commissioners and the companies be obliged to live up to their duty. These conditions exist to a scandalous degree in Washington. It is the rule and not the exception to have to stand. Washington is cited because the writer lives there, but it is no worse than in many other places. It is the fault of Congress, which should give the commissioners of the District of Columbia proper power over the car lines to compel them to furnish efficient service. (See Note 2.) It is not only the privilege but the duty of all good citizens to complain, and to insist on their rights. We are as a nation long suffering and easy going, and it is a mistake to be so.

Being compelled to stand, except where it cannot be prevented by reasonable precautions and foresight, might be compared to getting short measure from your grocer because he has not enough stock to go around, with the difference, however, that there is always more than one grocer and consequently competition, but the car companies have a monopoly and you have to take what you can get or go without.

We have come to consider the overcrowding of cars as a necessary evil and let it go at that, and endure being imposed on day after day and year after year.

It is not a necessity except under most unusual conditions.

Much has been said in the papers about the so-called "car ahead nuisance." This consists in making people change from one car to another in going uptown, usually at night. It is not fair to expect that the companies will run all their cars to the end of the line, as many of them would be partially, or entirely, empty beyond a certain point. It is, however, only just that when passengers are asked to change they should not be expected to get into a crowded car, but should be furnished with seats. In bad weather the car should be run under cover, where possible, and the change made there.

In Washington and most other cities, it is never necessary for people to be made to stand, except in the case of a great public gathering, such as an inauguration, and then only for a short time when the crowd begins to move homeward. In New York it is, unfortunately, a necessity sometimes when the crowd on the cars is greater than all the cars that can be put on the track at a safe distance apart can seat. The car companies will assume, if allowed to do so, that the necessity exists most of the time. On some of the lines it does actually exist for a short time on cars going downtown in the morning and for a short time on cars going uptown in the evening, but at no other times, and only at the aforesaid times when all the cars

have been put on that there is safely room for on the tracks. It is no excuse that the companies have in use all the cars they own. One of the elements necessary for efficient service is enough rolling stock to come up to the greatest possible demand.

**Note 1.—Extracts from the Public Service Commission's Law, passed May, 1907, bearing on the power of the Commissioners to exact efficient service from the car companies.**

**SEC. 26.** Safe and adequate service; just and reasonable charges.—Every corporation, person or common carrier performing a service designated in the preceding section, shall furnish, with respect thereto, such service and facilities as shall be safe and adequate and in all respects just and reasonable. . . .

**SEC. 36.** . . . Every railroad corporation and street railroad corporation shall have sufficient cars and motive power to meet all requirements for the transportation of passengers and property which may reasonably be anticipated, unless relieved therefrom by order of the commission. . . .

**SEC. 45.** . . . The commission may also recommend the enactment of such legislation, with respect to any matter within its jurisdiction, as it deems wise or necessary in the public interest, and may draft or cause to be drafted such bills or acts as it may deem necessary or proper to enact into law the legislation recommended by it.

**SEC. 48.** Investigations by commission.—1. Each commission may, of its own motion, investigate or make inquiry, in a manner to be determined by it, as to any act or thing done or omitted to be done by any common carrier, railroad corporation or street railroad corporation, subject to its supervision, and the commission must make such inquiry in regard to any act or thing done or omitted to be done by any such common carrier, railroad corporation or street railroad corporation in violation of any provision of law or in violation of any order of the commission.

2. Complaints may be made to the proper commission by any person or corporation aggrieved, by petition or complaint in writing setting forth any thing or act done or omitted to be done by any common carrier, railroad corporation or street railroad corporation in violation, or claimed to be in violation, of any provision of law or of the terms and conditions of its franchise or charter or of any order of the commission. Upon the presentation of such a complaint the commission shall cause a copy thereof to be forwarded to the person or corporation complained of, accompanied by an order, directed to such person or corporation, requiring that the matters complained of be satisfied, or that the charges be answered in writing within a time to be specified by the commission. If the person or corporation complained of shall make reparation for any injury alleged and shall cease to commit, or to permit, the violation of law, franchise or order charged in the complaint, and shall notify the commission of that fact before the time allowed for answer, the commission need take no further action upon the charges. If, however, the charges contained in such petition be not thus satisfied, and it shall appear to the commission that there are reasonable grounds therefor, it shall investigate such charges in such manner and by such means as it shall deem proper, and take such action within its powers as the facts justify.

3. Whenever either commission shall investigate any matter complained of by any person or corporation aggrieved by any act or omission of a common carrier, railroad corporation or street railroad corporation under this section it shall be its duty to make and file an order either dismissing the petition or complaint or directing the common carrier, railroad corporation or street railroad corporation complained of to satisfy the cause of complaint in whole or to the extent which the commission may specify and require.

**SEC. 50.** Power of commissions to order repairs or changes.—If, in the judgment of the commission having jurisdiction, repairs or improvements to or changes in any tracks, switches, terminals or terminal facilities, motive power, or any other property or device used by any common carrier, railroad corporation or street railroad corporation in or in connection with the transportation of passengers, freight or property ought reasonably to be made, or that any additions should reasonably be made thereto, in order to promote the security or convenience of the public or employees, or in order to secure adequate service or facilities for the transportation of passengers, freight or property, the commission shall, after a hearing either on its own motion or after complaint, make and serve an order directing such repairs, improvements, changes or additions to be made within a reasonable time and in a manner to be specified therein, and every common carrier, railroad corporation and street railroad corporation is hereby required and directed to make all repairs, improvements, changes and additions required of it by any order of the commission served upon it.

SEC. 51. Power of commissions to order changes in time schedules; running of additional cars and trains.—If, in the judgment of the commission having jurisdiction, any railroad corporation or street railroad corporation does not run trains enough or cars enough or possess or operate motive power enough, reasonably to accommodate the traffic, passenger and freight, transported by or offered for transportation to it, or does not run its trains or cars with sufficient frequency or at a reasonable or proper time having regard to safety, or does not run any train or trains, car or cars, upon a reasonable time schedule for the run, the commission shall, after a hearing either on its own motion or after complaint, have power to make an order directing any such railroad corporation or street railroad corporation to increase the number of its trains or of its cars or its motive power or to change the time for starting its trains or cars or to change the time schedule for the run of any train or car or make any other suitable order that the commission may determine reasonably necessary to accommodate and transport the traffic, passenger or freight, transported or offered for transportation.

SEC. 56. Forfeiture; penalties.—1. Every common carrier, railroad corporation and street railroad corporation and all officers, and agents of any common carrier, railroad corporation or street railroad corporation shall obey, observe and comply with every order made by the commission, under authority of this act, so long as the same shall be and remain in force. Any common carrier, railroad corporation or street railroad corporation which shall violate any provision of this act, or which fails, omits or neglects to obey,

observe or comply with any order or any direction or requirement of the commission, shall forfeit to the people of the state of New York not to exceed the sum of five thousand dollars for each and every offense; every violation of any such order or direction or requirement, or of this act, shall be a separate and distinct offense, and, in case of a continuing violation, every day's continuance thereof shall be and be deemed to be a separate and distinct offense.

2. Every officer and agent of any such common carrier or corporation who shall violate, or who procures, aids or abets any violation by any such common carrier or corporation of, any provision of this act, or who shall fail to obey, observe and comply with any order of the commission or any provision of an order of the commission, or who procures, aids or abets any such common carrier or corporation in its failure to obey, observe and comply with any such order or provision, shall be guilty of a misdemeanor.

**Note 2.—On December 6, 1905, a bill to regulate the operation of street railways in the District of Columbia, etc., was presented in the United States Senate by Mr. Gallinger. This bill was defeated, perhaps because it was defective, or by the influence of the car companies.**

**The bill seems to be very incomplete and a new one should be drawn and passed without delay. Until a proper bill is passed by Congress the people of Washington must apparently submit to outrageous treatment by the car companies.**

## CHAPTER II.

### Methods of Increasing Carrying Capacity on Surface Lines.

#### The Trailer.

In many cities trailers are used. A trailer is an ordinary street car, with no motive power of its own, which is hitched on to a trolley car, so as to increase the carrying capacity.

The reasons for using a trailer instead of putting on more trolley cars are as follows:

*First.* It is cheaper to construct than a trolley car if it has to be built, but it is usually an obsolete car made when horses were used, or an old trolley car with the machinery taken out.

*Second.* There is no increase in the number of men employed over what there would be if no trailer were hitched on.

These two reasons, it will be seen, are entirely ones of economy for the benefit of the street car companies only. If there were nothing against the use of trailers there would be no reason to complain, but we should rather approve of the street car companies doing their work economically.

There are, however, reasons why the use of trailers should be discouraged and gradually forced to be abandoned.

*First.* The openings in the railings of the platforms between the trolley cars and the trailers are elements of great danger, as passengers are apt to lean back against the places where the railings usually are in trolley cars and fall through.

*Second.* There being but one conductor to two cars, instead of one to each car, makes it more dangerous to get on and off.

Both of these causes of complaint can be partially remedied, and the remedy should be insisted on until the final complete abandonment of trailers. The first cause

of complaint can be remedied, either by closing up entirely the passageways between the cars or making them safe under foot and at the sides, so that it is impossible to fall through or to be caught between the cars. The second cause of complaint can be reduced in importance by employing another man. His place should be on the front platform of the trailer or the back platform of the trolley car, and he should not act as a conductor in the ordinary sense; that is, he should not collect fares, but he should be employed as a guard to help passengers on and off, and look out for their general safety and convenience. (Further on in this article I allude again to the employment of guards on street cars. See Chapter IV.)

Besides the two objections I have mentioned, there is the one that cars with trailers interfere more with other street traffic than single trolley cars do, and add an element of danger to it. They are also not so safe and sure in stopping in case of emergency, nor so agreeable to travel in as properly constructed single trolley cars.

Trailers, then, should for the present have the connection between them and the trolley car in front cut off by closing up the openings in the railings or have the passageway made safe. They should also carry an extra man as described above.

It would, of course, be a hardship for the street car companies to do away immediately with trailers, and it would not be fair to ask them to do so, but as they are against the public interest it should be understood and agreed to that no more trailers be put in use and that after a certain date their use should be prohibited.

#### Double Decked Cars.

I see no serious objection to double decked cars in very large cities where there is great congestion of street

traffic. They should not be used at all in any other places, especially on high speed or on sharp curves. In New York the proportion of carrying capacity to space occupied in the street would be greatly increased by their use, and during rush hours they would add materially to the seating capacity, but some changes will have to be made in the supporting girders of the elevated roads and the roadbeds at these points will have to be hung from them instead of being on top of them to give head room enough in the street below. More people than there are seats for should, however, never be allowed on top.

With the use of a guard on the back platform and of fare tickets (to both of which I allude further on, see Chapters IV and V), the guard in addition to his other duties could collect the tickets at the foot of the steps and prevent more passengers from going up than there are seats. With roof seats the car would either have to be turned round at the end of the trip or else there would have to be flights of steps up from both platforms. In the latter case the steps on the front platform should be shut off from use, or else the back steps only be used for ascending and the front steps only for descending.

### CHAPTER III.

#### Construction and Plan of Street Cars.

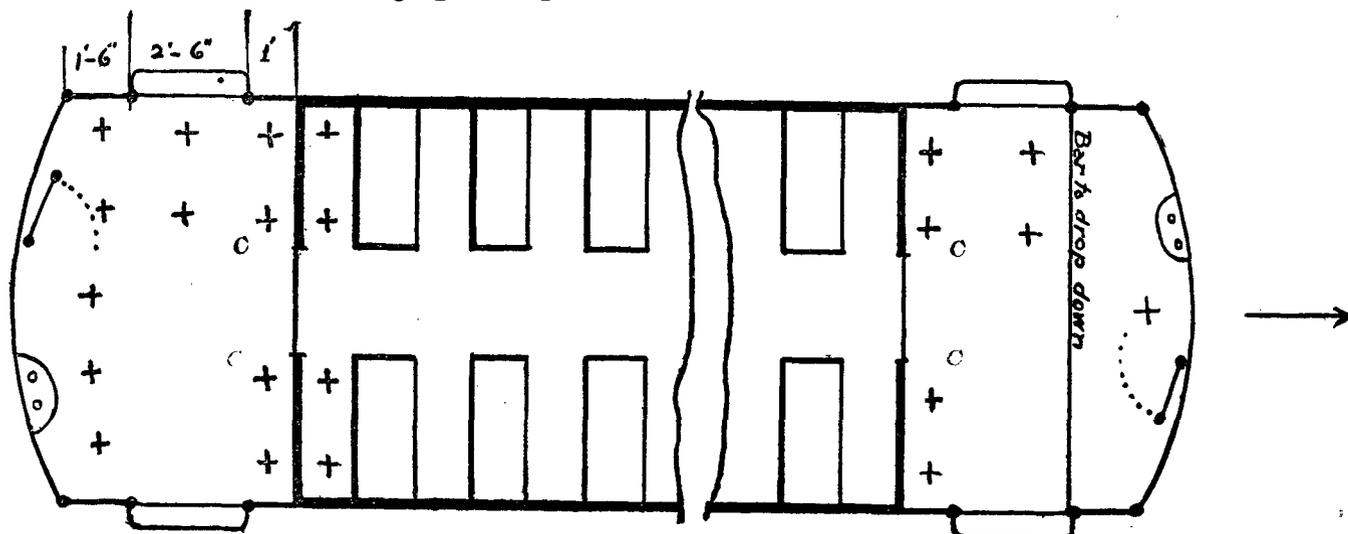
Can street cars be improved in plan? This has often been discussed, but not carefully considered, except from the point of view of economy to the car companies. The double decker has already been alluded to. It would nearly double the seating capacity and there does not seem to be any serious objection to it from the standpoint of the passenger, but it would make the collection of fares and also the construction of the car more expensive, to render it strong enough for the top load. The use of a guard and fare tickets, however, will simplify the collection of fares in the way in which I have hereinbefore stated. The extra cost to the companies, however, should not be considered if the convenience, comfort and accommodation of the public can be increased. As has already been said, double decked cars should not be run at an excessive speed, especially on curves.

The present plan for open cars is abominable and outrageous. It is simply brutal to expect women to climb up and down the high and awkward steps along the side, and must result in many cases of serious injury. In New

York the seats are put further apart than in some other places, in order that people may find room to stand in front of those sitting. It is indecent as well as uncomfortable and should be prohibited. Open cars with access from the platforms only and an aisle in the middle do away with the objections to a large degree. They are the best for both Summer and Winter, and make two kinds of cars unnecessary, and can be made with panels below the window pockets to be opened in warm weather. On these cars one never has to pass by but one person in getting out of a seat; in getting into a seat, where there is already one person, that person should be required to move up or rise if next the aisle to allow the other person to pass in. On account of the possibility of placing the seats nearer together by this plan the seating capacity of the car is but slightly, if at all, reduced. The aisle, being narrow, should be kept free and the standing room confined to the platforms and to the small spaces back of the two rear seats left free by reason of the backs of these seats being swung over to make the seats face forward.

*Sketch showing suggested Platform plan as described herewith.*

++ Indicate people standing.  
C C CC upright iron posts.



It would be a great improvement to slightly increase the size of the platforms (see note) and to put the steps about the middle of their sides. That is, there should be a railing about 12 inches in length extending back from the body of the car to an opening for the step. This should be about 2 feet 6 inches wide, and then the railing should continue back for about 1 foot 6 inches more, to meet the end railing of the platform. The steps not being on a line with the back of the body of the car itself, as at present, would permit two people to stand there without blocking up the passageway. The extension of 1 foot 6 inches beyond the steps would add sufficient space for a rod to be dropped down across the front platform back of the motorman and separating him from the passengers. The larger platforms would afford more standing room than there is now to make up for the aisle inside being kept clear.

#### **Entrances in the Middle of the Sides of Street Cars for Passengers.**

Cars with such entrances are exceedingly desirable on elevated and subway lines, as it is much easier and quicker to get on and off. For surface cars, however, it

does not seem as though they would be so good, unless perhaps if the end entrances were done away with, but probably not even then for the following reasons:

**First.** Neither the conductor (or collector), nor the guard (which the car companies should be forced to add to the personnel), can have the same control of the car, or so constant care for the safety and comfort of passengers, as he can have if on the back platform.

**Second.** The guard and collector both being inside the car cannot so easily see people who want the car to stop to board it, nor can the guard have so good a view of the surrounding street traffic, which is often very important.

Every effort should be made to improve the present plans of street cars. The surface cars in Hamburg, Germany, and the subway cars in Paris are worth study, as they combine many good features.

NOTE.—The so-called Montreal cars have since been introduced in New York, and while they have many advantages for cities where the traffic is not greatly congested, they have serious disadvantages in New York. The platforms have to be very long to accommodate the people who are waiting to pay their fare before entering. This necessitates the car itself being longer in proportion to the number of people accommodated than other cars, thus using up more space in the streets longitudinally, as well as making them dangerous while on curves to other vehicles and to pedestrians.

## **CHAPTER IV.**

### **A Guard on Surface Cars.**

When surface cars were less than half as large as they are now, there were two men on each car, and now that they have at least twice the former carrying capacity, it is not unreasonable to ask for and insist on having three men instead of two. There should be a guard on each car in addition to a driver and a conductor. The conductor's duties should be confined to collecting fares and he should be called the collector instead of the conductor. The guard's duties should be to stop and start the car, to assist passengers off and on, and to look out for their general comfort and safety. His position should be on

the back platform. The inside bells should ring to him and he only should ring the driver's bell. He should have the word "guard" on his cap, and also wear a distinctive band on his sleeve with the word "guard" on it also.

The advantages of this are that the safety and comfort of passengers are very much increased, the collector's duties lessened and his work better done. The trolley company will save part, if not all, of the extra expense through having to pay damages for less accidents and there will be less loss of fares.

## **CHAPTER V.**

### **Car Tickets.**

In Washington and in some other cities the conductors (or collectors) sell six tickets for 25 cents. It has been stated that this causes a great loss to the car companies, the loss being sometimes stated as one-sixth of the receipts. Now this is not quite true. It is a gross loss and not a net loss. If we deduct from the gross loss the following items we get the net loss.

**First.** A certain saving to the company because the use of tickets reduces the work of the conductors (or collectors), and consequently they have more time for other things and don't lose the collection of so many fares, and also have better supervision over the safety and comfort of passengers, and avoidance of accidents means a saving of damages to the company.

**Second.** A certain loss of tickets. What this amounts to would be difficult to compute accurately, but it is safe

to say that it is quite considerable. The writer knows from his own experience that when he leaves Washington for the Summer, he keeps finding tickets in his pockets for some time, and he does not think he is more careless than the average person. The tickets found he puts away to use when he gets back, but a good many people don't come back for a long time, if at all, and many tickets are doubtless lost. This loss must be large.

**Third.** The tickets being cheaper than paying the regular fare of 5 cents each time naturally increases the number of passengers, and makes up somewhat for the reduction of fares.

What all these items amount to, in saving to the companies, must be guessed at. It, however, cannot be small.

If the charter were accepted by the companies with an understanding that the fare was to be 5 cents, it would

be wrong to insist that they reduce it unless with their consent. The net loss entailed, it has been shown, where six tickets are sold for 25 cents, cannot be so great as one-sixth of the receipts—and it is a question as to whether there is any net loss. If a careful investigation shows no net loss, then the companies should be required to sell six tickets for 25 cents. It is not likely, anyway, that the net loss can be more than half what it is represented to be, or one-twelfth of the receipts, and, at this calculation, they could sell eleven tickets for 50 cents without loss.

If the car companies would actually suffer a serious loss by selling tickets at a less rate than the regular fare of 5 cents, the writer is not in favor of it unless it is in some way made up to them, and in view of the many heavy expenses to which the companies must be put to render efficient and, it should be, ideal service, he would suggest the following plan:

A single fare, 10 cents, but five tickets to be sold for 25 cents (see note).

This would not increase the fare over the present rate to those who care for the difference in price and it would have the desired effect of making the use of tickets nearly universal.

The main thing is, however, the importance to the public of having the convenience and other advantages of buying and using car tickets instead of paying each time, but there must be some inducement of economy to insure their general use.

From a sanitary point of view alone the avoidance of having to take dirty and often disease infected change is enough to make the use of tickets mandatory.

In New York, or in fact in any city, it would be ex-

tremely simple and of great benefit to make the tickets good on all lines, surface, subway and elevated.

The subway and elevated roads, however, would not get back any of the loss due to uncollected fares, as the fare is paid before access can be had to the cars, but still it is believed the other ways in which the companies would recoup would bring the loss within one-twelfth of the receipts, and it should be taken into consideration that the subway and elevated roads do not issue transfers. At any rate it might be good policy for them to fall in line and agree to it.

**NOTE.**—If a road is running at a loss a continuation of such conditions will eventually mean failure and perhaps municipal ownership. A public service corporation is a public servant and entitled to fair pay for services. Fair pay means enough to cover fixed charges and running expenses and afford a fair dividend on the capital invested.

The following plan is further suggested: A single fare 10 cents, but six or more tickets for 50 cents. To determine this number, the dividends and the market value of the stock must be known. To determine the market value take the average of the quotations for the preceding twelve months. If the dividends on the stock, taken at a market value, are not over 4 per cent., then only six tickets should be sold at 50 cents, and remain at this number till the dividends reach  $4\frac{1}{4}$  per cent., when seven tickets should be sold for 50 cents, and after this for each one-quarter of 1 per cent. increase in dividend one extra ticket should be sold for 50 cents, and when twelve tickets are sold for 50 cents, then six tickets should also be sold for 25 cents and the price of a single fare reduced to 5 cents. If the dividends are reduced again the price of fare must be increased, just as when the dividends increased the price of fare decreased.

The interest of the stockholders and of the public in the success of the road would thus be mutual.

The attitude of the public toward strikes would be more equitable as it would have to bear its share in increased costs.

Strikes, however, should be made impossible in public service corporations. It seems as though the settlement of all disputes between these corporations and their employees might well be made to come under the control of the Public Service Commission and its decisions be final.

## CHAPTER VI.

### Bells and Sign.

In many cities electric bells inside the cars which can be rung by the passengers are in use. Some years ago they were put in the New York cars, but have now been disconnected for some reason which the writer has been unable to learn. They are a great convenience, and the lack of them often results in passengers being carried beyond their destination. (Note.)

With a guard in addition to a conductor (or collector) these bells should ring to him on the back platform and

he alone should ring the bell to the driver to start or stop the car.

Electric signs should be placed at the ends of all elevated and subway cars, indicating next stop of train. These could be worked automatically or by a push button. This would obviate the calling out of stations, which is often difficult to understand and tends to delays.

(NOTE: Since this was written push bells have again been placed inside the new pay-as-you-enter cars.)

## CHAPTER VII.

### Heating.

The introduction of electricity in nearly all of our city transportation lines has made the heating of the cars much simpler and more satisfactory than formerly, first by stoves and then in the steam lines by steam pipes. Unfortunately we shall have to get along with steam heating in our steam railroads for the present.

The disadvantages of steam heating in steam cars and of electric heating in trolley cars can be, however, con-

siderably reduced by better installation and greater care on the part of the management of the roads in carefully instructing their servants in its control.

The installation can be improved by a better distribution of the heat. When there are steam pipes or electric radiators, the cars would be much more comfortable if the heat were more evenly distributed, but the largest radiation, and perhaps all of it, should be near the ends

of the cars where the doors are and the greatest supply of fresh air, which, would, therefore, be tempered as it comes in. It is, unfortunately, usual with steam heat to so arrange it that either the whole of the radiating surface has to be turned on or left shut off. This can be improved by dividing the radiating surface and putting separate valves so as to make it possible to turn on a part at a time, or the whole, as the outside temperature may make necessary. In a similar manner, electric radiators can be so constructed as to use fractions or the whole of them at a time. When the heat is under the seats, the seats themselves should be protected from the hot air coming through them by means of air spaces or some other method of insulation. It is very injurious to sit on a hot seat, and if one has to go out into the cold air afterwards, it is doubly so.

Better control of the supply of heat can be brought about by having thermometers situated about the center of the car at a height of 5 or 6 feet from the floor, and directions given to the employees to keep it as near as possible within a given range of temperature.

It is a mistake to keep any cars, and especially those of city transportation lines, as hot as is usually done.

People who go out, as a rule, are sufficiently warmly clothed to walk or to drive in a closed carriage, but cars are heated to about the same temperature as houses. They should be heated only enough to allow for the fact that when you ride you are not exercising. From 5 to 10 degrees would be sufficient for this purpose on city transportation lines, though more is required on regular railroad cars where the time spent on them is longer.

There should be no artificial heat in regular railroad cars unless the outside temperature is below a certain point—say 60 degrees, and in a city transportation car unless it is below 50 degrees. When heat is on, in a regular railroad car, it should never be allowed to get over 70 degrees, and in a city transportation car over 60 degrees. Before it reaches these points it should be turned off and the employees should be instructed about it, and punished if they are reported. If the employees wait before turning the heat off till the thermometer reaches the maximum limit it is too late, as the pipes or radiators do not immediately cool, and the temperature will continue to go up after the heaters are turned off. With steam pipes the heat should be turned off when the thermometer reaches about 60 degrees, in order to keep it below 70 degrees, and with electric radiators when the thermometer reaches about 55 degrees, to keep it below 60 degrees. The reason of the difference between 10 degrees in one case and 5 degrees in the other is due to the fact that electric radiators cool off more quickly than steam pipes, and are, therefore, under more quick control. It would probably be practical to automatically regulate both steam and electric heat in cars by thermostats. These, however, need considerable and continued care in adjustment, and are expensive. If the heating plants in cars are properly installed and the employees carefully instructed in their duties, there need seldom be any cause to find fault. The roads should encourage passengers to complain of any bad service and all complaints be promptly and courteously acknowledged and if found just, the employees should be admonished or punished.

## CHAPTER VIII.

### Ventilation of Street Cars.

More care should be taken by the car companies to see that their employees properly ventilate the cars and better appliances for the purpose should be installed. In the elevated and subway cars the ventilators are usually controlled by levers, so that with one pull it is possible to open all the ventilators on one side of the car, either all the way or partially, as the temperature outside may require. The usual method of separate ventilators pivoted at the ends is not good, though cheaper to install. If it rains the water is more apt to come in than with the other kind, and although the employees may have received orders to see that some of them are always open, the orders

are not usually obeyed. With a car packed with people the cubic contents remaining for breathing space is so small that the air immediately becomes unfit to breathe unless it is being constantly renewed. It is partially due to lack of ventilation that the platforms are crowded, as they often are, even when there is plenty of room inside. It is not unlikely that the lack of proper ventilation of street cars is one of the greatest causes for the spread of consumption, pneumonia, grippe and other diseases of the lungs, nose and throat. The Board of Health should long since have insisted on having this matter remedied. See Sec. 8 of the Sanitary Code, quoted in Note, Chapter IX.

## CHAPTER IX.

### Speed of Street Cars. (See Note.)

Some years ago while occupied in trying to get ordinances passed by the Board of Aldermen and regulations for street traffic adopted by the Police Department, the writer had embodied a clause in relation to the legal speed rate limit for street cars. It seemed desirable to obtain

the co-operation of the street car companies, but they intimated that they did not want any clause in relation to the speed for their cars, and at their request, and in order to get their co-operation, it was left out. Usually when the streets are crowded with traffic, cars cannot attain a

high speed rate. At certain times, particularly at night, to make up time or for other reasons, the cars reach a speed rate that should not be permitted, and it seems necessary that some reasonable regulation should be adopted. The Police Department has the necessary power to regulate it, as also has the Public Service Commission.

NOTE.—In December, 1903, there was an Ordinance passed on the Rules of the Road (see Art. II, Sec. 1 of the ordinance on speed). This section, however, should be repealed, for if enforced it would be a great hardship, as it is unreasonable to expect that we would be satisfied with a speed rate of eight miles an hour. It would mean that at certain crowded hours of the day it would take, with necessary stops, etc., probably about half an hour to go one mile. However, Sec. 3 of Art. II of the Ordinance prohibits excessive speed in the following words: "No person riding, driving or in charge of any vehicle on any street, avenue, pathway or driveway in the city shall drive the same at a speed greater than reasonable and proper, having regard to the traffic and use of the highways, or so as to endanger the life and limb of any person," and Section 4 of the same article says: "No vehicle shall cross any street or avenue running North or South, or make any turn at a rate of speed exceeding one-half of its legal speed limit."

The Police Department has ample power to make any regulation it thinks necessary. See Ordinances, Art. VII, Sec. 1; also

Section 315 of the City Charter; also Section 8 of the Sanitary Code.

Section 1 of Article VII of the Ordinances reads as follows: "The Police Department shall have all powers and duties in relation to the management of vehicular traffic."

Section 315 of the City Charter reads: "It is hereby made the duty of the Police Department and force . . . to regulate the movement of teams and vehicles in streets, bridges, squares, parks and public places."

Sanitary Code, Section 8, provides, "that no person shall do or contribute to the doing of any act dangerous to life or detrimental to health, nor omit to take any reasonable and proper precaution to prevent danger or detriment to life or health." If the Police Department "omits to take any reasonable and proper precaution" it fails in its duty, and by Section 315 of the City Charter it is made its duty to regulate the movement of vehicles, etc.; and Section 1, Article VII of the Ordinances says it has all powers and duties in relation to the management of vehicular traffic. Thus by these three instruments: City Ordinances, City Charter and Sanitary Code, the Police Department has all the power necessary to control the situation within the city limits. Beyond city limits we must look to the Public Service Commission.

On October 5, 1907, the writer published an article on National Speed Regulations Proposed for Motor Vehicles, Bicycles and Horses. See Part III of this book. The street car is a motor vehicle and the regulations proposed in the article at that time still seem to the writer reasonable and to cover all cases satisfactorily.

## CHAPTER X.

### Noise of Surface and Elevated Cars.

The noise of surface and elevated cars can, of course, not be done away with entirely, but the importance of modifying it so far as possible cannot be overestimated. The noises are of several kinds, and all of them can be reduced in a measure.

That due to so-called flat wheels there is no excuse for, and it should be absolutely stopped and a heavy fine imposed whenever it occurs.

That due to the excessive ringing of bells on surface cars can be very much reduced. The companies should instruct their drivers to ring the bells only when necessary, and strict supervision be kept on them by spotters, and violations reported. The running on too fast schedule, especially at night, is responsible for a good deal of it, and proper speed regulations would tend to make much of it unnecessary. Experiments should be tried with different kinds of bells and those adopted which, while of as sweet a tone as possible, would be easily heard at a short distance, but a little way off would be less noticeable than those now in use. The tone should be on a high key, penetrating, distinct and distinctive, but not very loud, for the use of the bell is to attract the attention of people not over 50 to 100 feet away.

Doubtless very much of the noise due to the machinery of the car could be eliminated by careful oiling, prompt replacing of worn parts, and proper tightening up of loose ones. If you will listen at night to several cars passing by when other things are quiet you will observe that there is a great difference, and this difference is due undoubtedly to one or more of these causes.

The noise as the cars pass over switches or intersecting tracks can also be reduced by greater care in laying

and construction of the rails, especially at the switches and frogs.

The roadbeds of elevated roads might be made less noisy by some means of deadening, but just how is the best way the writer does not feel competent to say, though the expense necessary to do it is probably the only reason it has not been done before.

The street car rails are fastened directly to the steel stretchers and it is likely, if wooden sleepers were put along under the rails, between them and the stretchers, it would materially reduce the noise due to vibration. The pavement is usually asphalt, either laid right up to the rails or with stone or vitrified brick blocks on one or both sides of them.

NOTE.—The method of laying asphalt up to the rails is responsible for the constant trouble with it at this line; the jarring of the rails allows the water to get in between it and the rail and asphalt will not stand water well when it is allowed to get below the surface or even when it is allowed to stand constantly on its surface. This is especially noticeable in New York streets, as usually they have not sufficient crown.

If wooden paving blocks were laid between the tracks all the way across, including the middle space, and one row of them outside the outside tracks (lengthways across the street), it would not only reduce the noise due to vibration, but would be better in every way, though somewhat more expensive in first cost and in repairs. The difference in expense would not be so great as to be prohibitive, however, in view of the quite important improvement it would produce, and there is no doubt that it should be adopted or at least be given a fair trial.

Although asphalt pavement has many advantages, a properly laid wood pavement has more to recommend it in proportion to its disadvantages than any other. It is

more expensive in first cost and also in maintenance, but we will probably eventually follow in the footsteps of Paris and London and generally adopt it. The accumulated heat in Summer is very much against asphalt, especially in warm climates.

The suppression of all noises not absolutely necessary, bells of harsh tone, steam whistles, whistling, bad street music, calling of hucksters, rattling of iron on improperly loaded wagons, automobiles with sirens, automobiles and motor cycles without mufflers, the running of the engines of automobiles while they are at a standstill, automobiles with rattling parts, barking of dogs, undeadened riveting of steel structures, unreasonable whistling of steamboats, launches without mufflers, exhausting of the steam of locomotives, steamboats and factories and anything that tends

to unnecessarily increase the din of modern life should be regulated by law. We become used to noises, and if they cannot be helped we must stand them, though the fact that we do not notice them does not mean that they have no effect on the nervous system. When we know that a noise is due to the selfishness or carelessness of others it is much harder to bear. Lately there has been formed a Society for the Suppression of Unnecessary Noises in New York. If it can arouse public sentiment it will succeed in accomplishing a great work, but the education of the people to the knowledge that a very large part of the noise is uncalled for, unnecessary and superfluous is the step which will bring about positive results. It is not an unreasonable expectation that the noises in cities can be reduced at least 50 per cent.

## CHAPTER XI.

### Stopping Places for Surface Cars.

In December, 1903, an ordinance in relation to the stopping of street cars on the near side was passed. It read as follows:

"Surface cars shall stop only on the near side of the street, and before reaching crosswalk, to discharge or take on passengers."

The word only was inserted by the Aldermen and this made it unlawful to stop anywhere but on the near side for passengers. Where two lines intersect it is often desirable to have the cars stop on the far side also. The ordinance was unfortunately put in force in Winter, when the weather was extremely cold and there was snow on the ground. In consequence the bad features were apparent and the good ones not perceived. Had this ordinance been passed without the insertion of the word only and its operation been delayed till Spring, its fate would have been different.

The things in favor of the near side stop are as follows:

It is safer because the stops are made before crossing intersecting traffic.

It saves time, because now the cars have to stop on the near side at fire engine, ambulance and school streets and also again on the far side for passengers. It, therefore, cuts out a large number of extra stops in the length of the city. The time saved by eliminating these stops allows more cars to be run within a given time and more passengers carried.

The principal objection to the near side is that when there is snow on the ground it is easier to get on at the foot crossing on the far side of the street. This is, under existing circumstances, a very serious objection, but if the gate on the front platform of the car were always open, this objection would be removed and, if the street were cleaned as far back as the rear platform, there would be two entrances free from snow instead of one, as at pres-

ent. It would, perhaps, be only fair for the street railway to do that part of the street cleaning, as it is for the benefit of their passengers alone. There is, I believe, in their charter some clause in regard to the removal of snow. Unfortunately I cannot look it up in time for this article.

Keeping open the front platform gate, thereby allowing the front door to be used, has the objection in cold weather of causing draughts. It also has the advantage of giving better ventilation. Whether more real injury is done by the cold or by bad air is a question. Even if cold is worse than foul air, the advantage of the two entrances and exits far outbalances the difference.

I quote an extract from the *Washington Star* of January 19, 1904:

#### New York and the Near Side.

New York has a new grievance, an absolute essential to its perfect enjoyment of life. This new grievance is that the Board of Aldermen the other day, without giving notice of its intention, adopted a new ordinance requiring street cars to stop on the "near" side of street crossings, instead of the "far" side, as had previously been the rule. And, furthermore, the board required that the new regulations should go into effect at once. Of course, in the absence of proper notice of the change, the patrons of the car lines were greatly discommoded. The first day tens of thousands were caught waiting on the wrong side of the street, and had to hustle over to get aboard, and there were some narrow escapes from serious accidents and some comical experiences. But out of the new conditions arose a tremendous howl against the street car companies and the aldermen—when the source of the trouble was ascertained—and the disposition of those in authority to meddle with existing conditions. And so petitions have been prepared, with great lists of signers, asking that the old rule be restored.

Washington is interested in this matter, for it is one of the "near-side" cities, where the street car stops are based upon considerations of the public safety. It formerly had the "far-side" rule, and when the danger of permitting a car to go always across an intersecting street without stopping was proved, the near-side rule was adopted. Then for no good reason it was abandoned, and at last the expected happened, and a couple of firemen were killed in consequence of the restored rule, and as a result of the succeeding agitation, pointed by a repeated demand by *The Star* that the near-side rule be restored, the commissioners proclaimed that safer method of stopping the cars. It is now in vogue, and is working to the entire satisfaction of the community, and it is to be hoped

that no change will ever again be made or even proposed. It is to be remarked that in the case of the local changes ample notice has always been given to the patrons of the car lines, so that they are never taken unawares.

New York has evidently failed to understand the advantages of the near-side stop. One is, for instance, that by it the rapid transit lines are saved the necessity of making double stops at car-line intersections. It is true that in this city, in some cases, the cars will stop on the far side at such points, as well as on the near side, but this is a voluntary concession to the supposed requirements of public convenience. The chief merit of the near-side rule is that it checks the car's momentum before it crosses

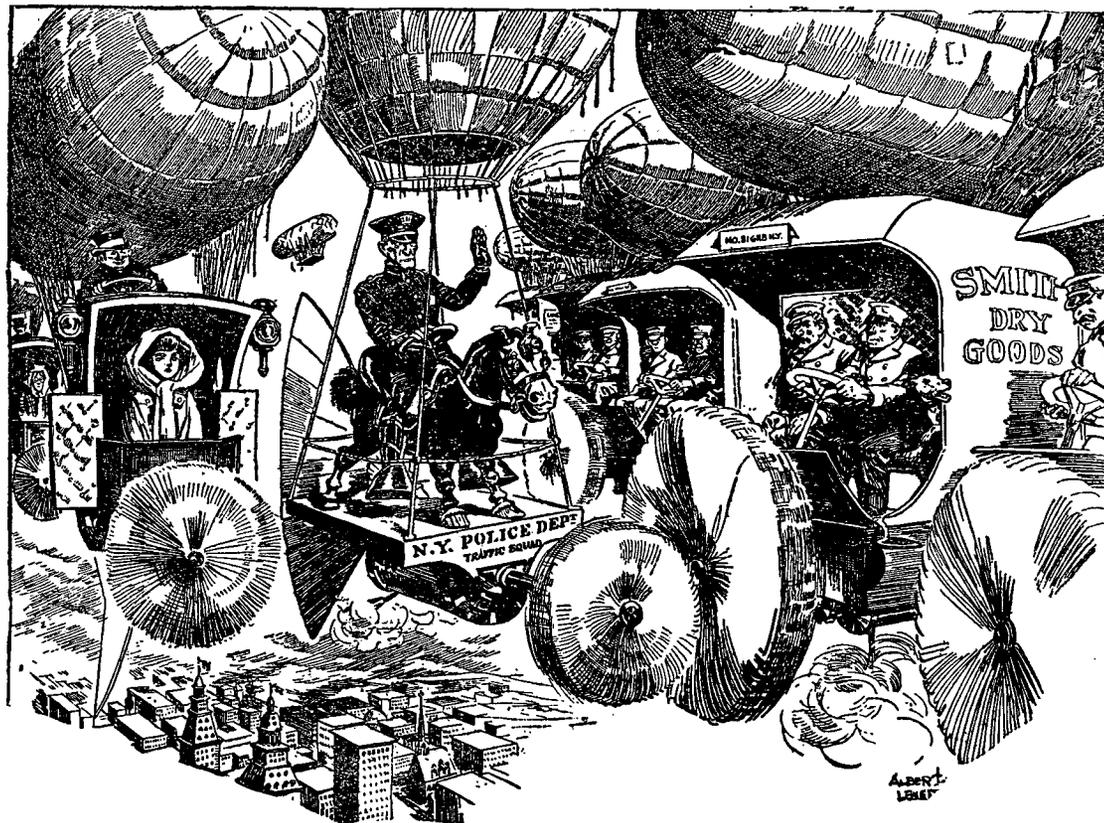
the street, and thus reduces to a minimum the likelihood of accident. Of course, every car does not stop at every corner, but to the extent that it does its menace to life is lessened by the fact that the stop is made before the street is crossed.

One of the objections raised in New York, indeed practically the only one, short of the surprise, is that the near-side stop brings the rear platform a car length away from the crossing. Washington does not suffer in this respect, for its asphalt streets are all "crossings" in this sense. New York might, however, adjust this difficulty by having its snow paths cut with reference to the new stopping points. Certainly the lessening of the life risk is worth some sacrifice.

#### END OF PART IV.



AN OLD TIMER



THE TRAFFIC SQUAD OF THE FUTURE

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